United States
Department of
Agriculture

Natural Resources
Conservation
Service

Oregon
Basin Outlook Report

February 1, 2012

Photo courtesy of Oregon Department of Transportation

Residents had to use boats to get around Mapleton on January 19th, 2012, due to extensive flooding in the small town, which is located in the Oregon Coast Range. The Siuslaw River at Mapleton crested above 28 feet on January 19th, with an estimated flow of 48,300 cubic feet per second (cfs). This was the fourth highest flood crest measured at the Mapleton gauge in its 44 year record, and it was the highest flow since February 7, 1996. A cold storm system in mid-January brought widespread low-elevation snow to Oregon, which was later scoured by warm rains as the cold air pool receded. Many snow measurement sites across the state recorded impressive gains in snow water content as a result of January's mid-month precipitation event.

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February 1, 2012

SUMMARY

January was a month of weather extremes for Oregon. Very dry weather dominated the first half of the month, and then the jet stream finally took aim at the Pacific Northwest. A monster of a storm hit Oregon on January 17, pounding the state with snowfall from the valleys to the mountains, intense rainfall, blankets of ice, and gale force winds. The storm caused widespread destruction due to flooding of unregulated tributaries and high winds combined with ice and snow. Damage was worst in western Oregon where swollen rivers caused several deaths and extensive damage to infrastructure, such as houses, buildings, bridges, and roads. Services were disrupted across the state for several days while emergency crews scrambled to deal with power outages, thousands of downed trees, landslides, and highway closures.

From a water supply perspective, Oregon rebounded dramatically from the meager mountain snowpack that was present prior to the mid-January storm. The statewide snowpack increased from 38 to 71 percent of normal in less than a week. In addition to mountain snow, precipitation across most of the state was well above normal for January. Despite this boost, most of Oregon remains below average for both snowpack and water year precipitation. Water supply conditions have improved since January 1, but forecasts for Oregon streams remain below normal for summer 2012.

SNOWPACK

The first wave of the mid-January storm blanketed the state with snow from the streets of Portland, all the way to up to mountains. This cold snap ended abruptly, and the warm rains that followed melted the new fallen snow at low elevations. The additional runoff from melting snow exacerbated the already swollen streams in the coast range and foothills of the Cascades. However, the snow continued to pile up at higher elevations around the state. So much snow fell at Mt. Bachelor, that the ski resort told skiers to stay home on January 19, due to power outages, avalanche danger, and road closures.

Prior to the storm, nine long-term SNOTEL sites in northeast and southern Oregon were at record low snowpack levels. During the four days at the peak of the mid-January storm, the snowpack doubled at many SNOTEL sites across Oregon. This was a major boost to the paltry statewide snowpack. By the end of the storm, snowpack levels had significantly improved across the state, but still remained below normal. As of February 1, the snowpack ranged from 52 percent of average in the Lake County and Goose Lake basins to 87 percent of average in the Hood, Mile Creeks, and Lower Deschutes basins. Snow measurements were collected at 80 SNOTEL sites, 33 snow courses, and 25 aerial markers in Oregon this month.

State meteorologists are calling for continued weak to moderate La Niña conditions this spring, which often bring below normal temperatures to Oregon. If model predictions are correct, cool mountain temperatures could prolong the snowpack accumulation season and delay the spring snow melt.

PRECIPITATION

The mid-January storm was a dramatic example of how one event can make a large impact on water supply conditions. Four-day storm totals of 3 to 6 inches of precipitation were common at SNOTEL sites across Oregon. The maximum storm total measured at an Oregon SNOTEL site was 14.2 inches at North Fork SNOTEL in the Bull Run watershed near Portland. Statewide, the water year precipitation increased from 62 percent of average to 83 percent of average in less than a week. Despite this boost, all basins remain below normal for water year precipitation as of February 1.

January precipitation was well above normal for almost every Oregon basin. Monthly precipitation ranged from 87 percent of average in the Lake County and Goose Lake basins to 152 percent of average in the Owyhee and Malheur basins. Since October 1, water year precipitation has ranged from 59 percent of average in the Lake County and Goose Lake basins to 99 percent of average in the Hood, Mile Creeks, and Lower Deschutes basins.

RESERVOIRS

The mid-January precipitation event brought an increase in inflow to most Oregon reservoirs, especially in the rain-dominated watersheds in the western part of the state. Storage in reservoirs across the state remains higher than last year at this time.

The February 1 storage at 26 major Oregon reservoirs analyzed in this publication was 103 percent of average. As of February 1, water storage at these reservoirs totaled 1,929 thousand acre feet (kaf), representing 60 percent of useable capacity. Last year at this time these same reservoirs stored 1,700 kaf of water, or 53 percent of useable capacity.

STREAMFLOW

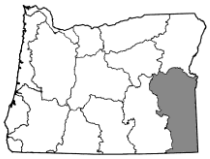
Summer streamflow forecasts for Oregon have risen since last month's publication, due to an improved snowpack and higher than normal January precipitation. Despite the improvement, streamflows are still expected to be below normal for the summer of 2012. Forecasts in the southern and eastern basins remain significantly lower than the basins in the northern and western parts of the state.

A summary of streamflow forecasts for Oregon follows:

STREAM	PERIOD	PERCENT OF AVERAGE
Owyhee Reservoir Inflow	Apr-Sep	57
Grande Ronde R at La Grande	Apr-Sep	77
Umatilla R at Pendleton	Apr-Sep	87
Deschutes R at Benham Falls	Apr-Sep	96
MF Willamette R bl NF	Apr-Sep	86
Rogue R at Raygold	Apr-Sep	73
Upper Klamath Lake Inflow	Apr-Sep	59
Silvies R nr Burns	Apr-Sept	74

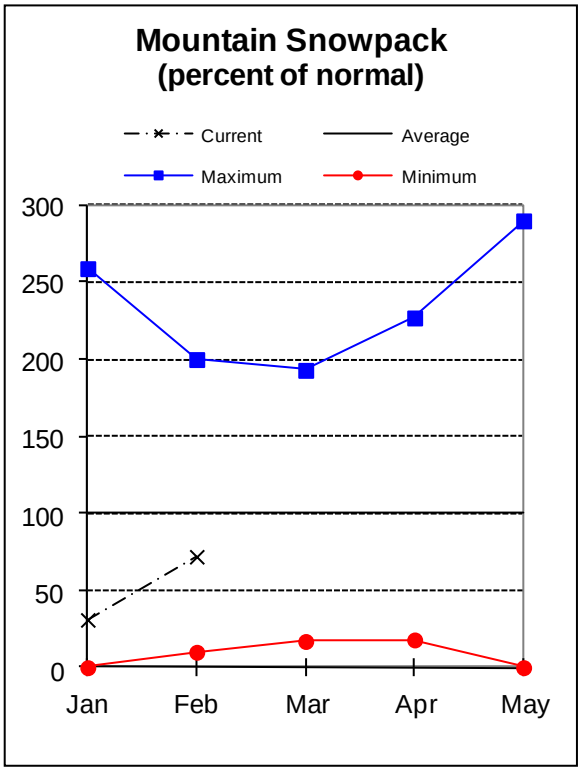
Some of these forecasts assume that normal weather conditions will occur from now to the end of the forecast period. The forecasts in this bulletin are a result of coordinated activity between the Natural Resources Conservation Service and the National Weather Service as an effort to provide the best possible service to water users.

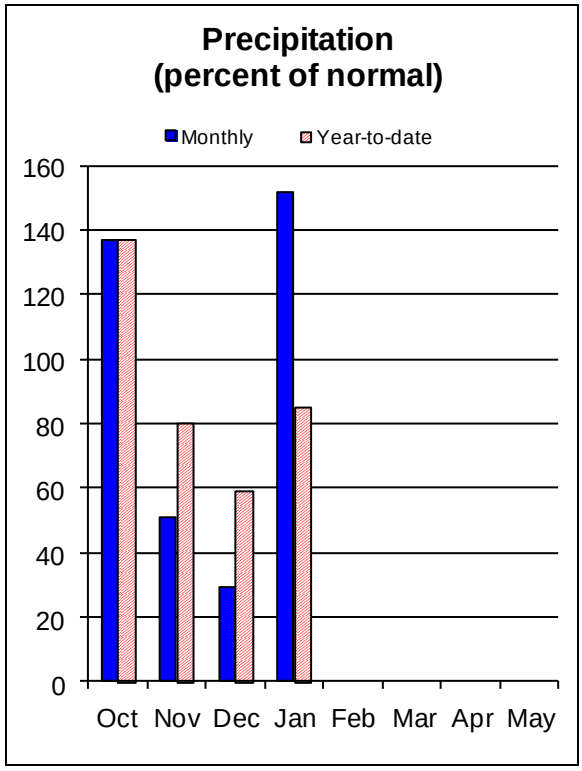
This report contains data furnished by the Oregon Department of Water Resources, U.S. Geological Survey, NOAA National Weather Service and other cooperators. This report will be updated monthly, January through June.



Owyhee and Malheur Basins

February 1, 2012





Water Supply Outlook

The mid-January storm brought much needed snow to the Owyhee and Malheur basins. The snow water equivalent more than doubled at many SNOTEL sites in the basin during this storm. Last month, the basin snowpack was 31 percent of average, the lowest in the state. By February 1, the basin snowpack had risen to 72 percent of average, which was the largest increase in the state. However, the aerial markers in this region indicate that the snow coverage is spotty. Many aerial markers that typically have snow on the February 1 survey had only a skiff of snow or were completely bare this month.

Precipitation for the month of January was 152 percent of average for the Owyhee and Malheur basins. This was the highest in the state. Since the beginning of water year 2012, precipitation in the Owyhee and Malheur basins has been 85 percent of average. While still below normal, this is a dramatic improvement from last month's report.

Reservoir storage in the Owyhee and Malheur basins remains above average, which may provide some relief from low water supply conditions. February 1 storage at the four irrigation reservoirs in the basin was 118 percent of average and 67 percent of capacity.

As of February 1, streamflows in the Owyhee and Malheur basins are still forecast to be well below normal for the summer of 2012. The April through September streamflow forecasts in the basin range from 54 percent of average for the Owyhee River near Rome to 59 percent of average for the Malheur River near Drewsey. .

For more information contact your local Natural Resources Conservation Service office:
Ontario - (541) 889-7637
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

OWYHEE AND MALHEUR BASINS
Streamflow Forecasts - February 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Malheur R nr Drewsey	FEB-JUL	39	62	80	63	101	135	127
	APR-JUL	13.4	29	43	58	60	89	74
	APR-SEP	19.0	33	45	59	59	82	76
NF Malheur R at Beulah (2)	FEB-JUL	28	46	61	68	78	106	90
Owyhee R bl Owyhee Dam (2)	FEB-JUL	143	255	350	50	460	645	700
	FEB-SEP	163	280	375	51	485	675	730
	APR-SEP	96	176	245	57	325	465	430
Owyhee R nr Rome	FEB-JUL	65	183	315	48	445	640	655
	FEB-SEP	73	196	330	49	465	660	675
	APR-SEP	31	118	215	54	310	455	400

OWYHEE AND MALHEUR BASINS
Reservoir Storage (1000 AF) - End of January

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BEULAH RES	60.0	32.4	25.5	28.5
BULLY CREEK	30.0	13.8	13.7	13.6
OWYHEE	715.0	516.6	355.6	438.3
WARMSPRINGS	191.0	109.2	53.9	87.7

OWYHEE AND MALHEUR BASINS
Watershed Snowpack Analysis - February 1, 2012

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Owyhee	19	54	56
Upper Malheur	8	81	78
Jordan Creek	3	65	73
Bully Creek	3	0	88
Willow Creek	4	52	82

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table. The average is computed for the 1971-2000 base period.
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

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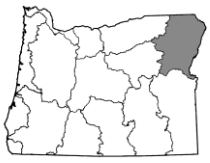
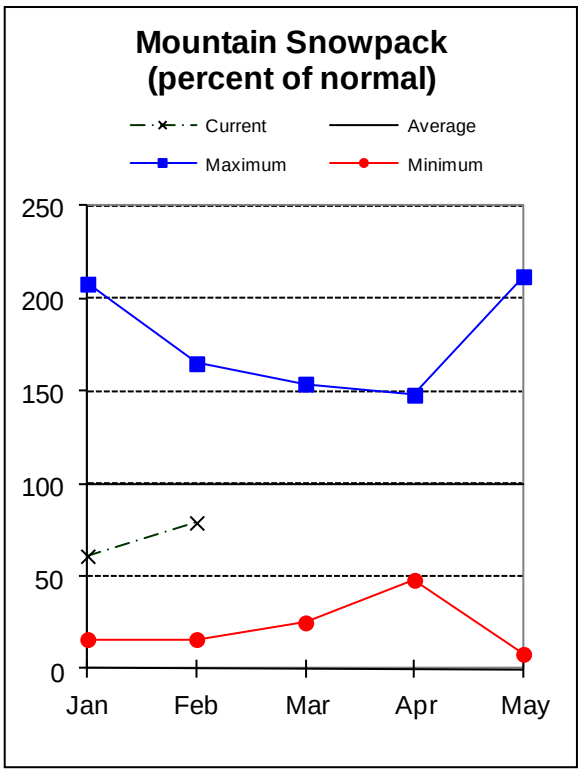
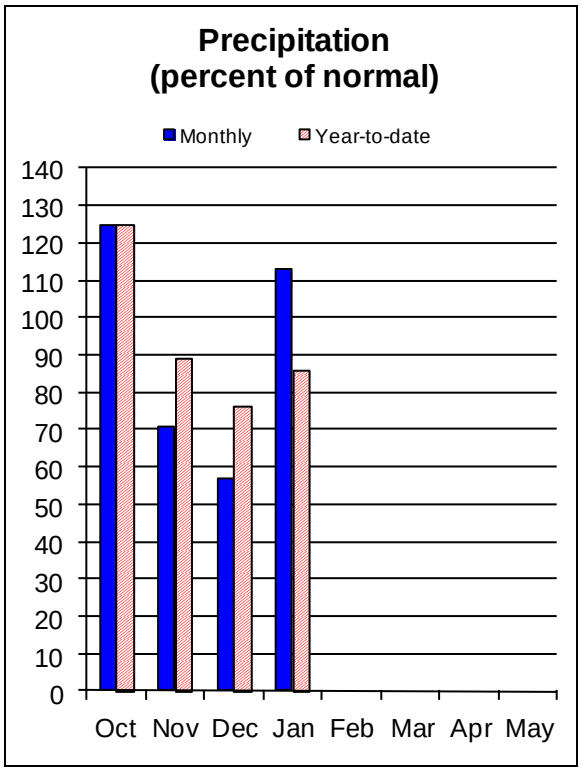


Burnt, Powder, Grande Ronde, and Imnaha Basins

February 1, 2012





Water Supply Outlook

What a difference one big storm can make. The snow that fell in northeastern Oregon during the mid-January storm greatly improved the snowpack in the region. Before the storm, record low snow measurements were recorded at Bourne, Aneroid Lake, Tipton, and Wolf Creek SNOTEL sites. By February 1, these sites were no longer setting records, and the basin snowpack had risen to 79 percent of average.

Precipitation for the month of January was 113 percent of average for the Burnt, Powder, Pine, Grande Ronde and Imnaha basins. Since the beginning of water year 2012, precipitation in the basins has been 86 percent of average. While still below normal, this is a significant improvement from last month's report.

February 1 storage at Phillips Lake, Thief Valley and Unity reservoirs was 88 percent of average and 53 percent of capacity.

Streamflow forecasts in the Burnt, Powder, Pine, Grande Ronde, and Imnaha basins increased slightly from last month's report. The April through September streamflow forecasts range from 69 percent of average for the Burnt River near Hereford to 84 percent of average for the Lostine River near Lostine. Elsewhere in the basin, the Grande Ronde River at LaGrande is forecast to be 77 percent of average for the April through September period. At this point in the season, water users in the basin can expect below normal streamflows for the summer of 2012.

For more information contact your local Natural Resources Conservation Service office:
Enterprise- (541) 426-4588; Baker City - (541) 523-7121; LaGrande - (541) 963-4178
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

BURNT, POWDER, PINE, GRANDE RONDE AND IMNAHA BASINS
Streamflow Forecasts - February 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Bear Ck nr Wallowa	APR-SEP	41	49	54	83	59	67	65
Burnt R nr Hereford (2)	FEB-JUL	22	33	40	70	47	58	57
	APR-SEP	10.4	20	27	69	34	44	39
Catherine Ck nr Union	APR-JUL	37	45	51	82	57	65	62
	APR-SEP	40	48	54	82	60	68	66
Deer Ck nr Sumpter	FEB-JUL	8.3	11.6	13.9	72	16.2	19.5	19.4
Grande Ronde R at La Grande	MAR-JUL	121	165	195	79	225	270	247
	APR-SEP	79	118	145	77	172	210	188
Grande Ronde R at Troy (1)	MAR-JUL	895	1180	1310	83	1440	1730	1580
	APR-SEP	720	1000	1130	83	1260	1540	1370
Imnaha R at Imnaha	APR-JUL	142	189	220	82	250	300	270
	APR-SEP	158	205	240	81	275	320	295
Lostine R nr Lostine	APR-JUL	81	90	95	85	100	109	112
	APR-SEP	86	96	102	84	108	118	121
Pine Ck nr Oxbow	FEB-JUL	101	142	170	82	198	240	208
	APR-JUL	69	98	117	79	136	165	148
	APR-SEP	73	102	122	79	142	171	154
Powder R nr Sumpter	FEB-JUL	30	44	53	72	62	76	74
	APR-JUL	21	33	41	71	49	61	58
	APR-SEP	21	33	42	71	51	63	59
Wolf Ck Reservoir Inflow (2)	MAR-JUN	8.1	11.5	13.8	85	16.1	19.5	16.2

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BURNT, POWDER, PINE, GRANDE RONDE AND IMNAHA BASINS Reservoir Storage (1000 AF) - End of January				
Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
PHILLIPS LAKE	73.5	38.0	46.0	40.8
THIEF VALLEY	17.4	13.6	13.8	16.5
UNITY	25.2	10.1	10.8	12.9
WALLOWA LAKE	37.5	16.8	14.2	17.9
WOLF CREEK	10.4	4.7	4.5	3.2

BURNT, POWDER, PINE, GRANDE RONDE AND IMNAHA BASINS Watershed Snowpack Analysis - February 1, 2012			
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Upper Grande Ronde	9	91	83
Wallowa	4	99	77
Imnaha	4	104	79
Powder	11	95	83
Burnt	5	66	74

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

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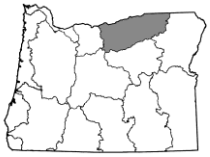
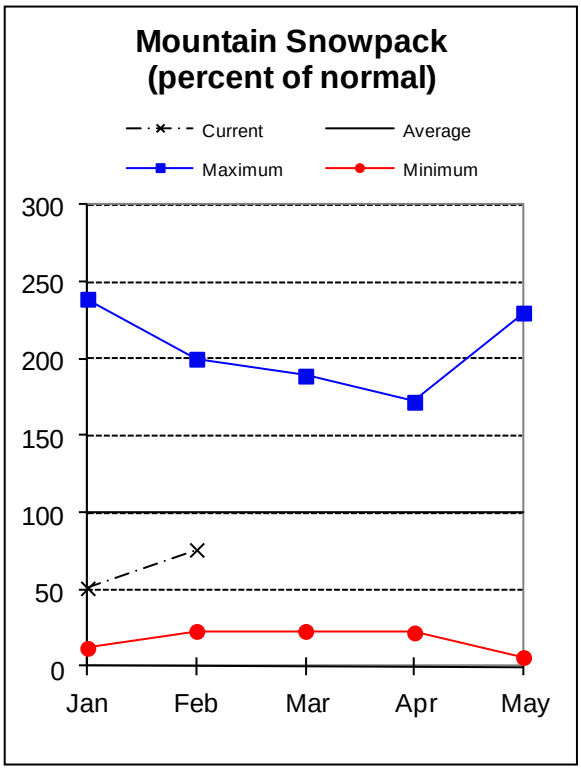
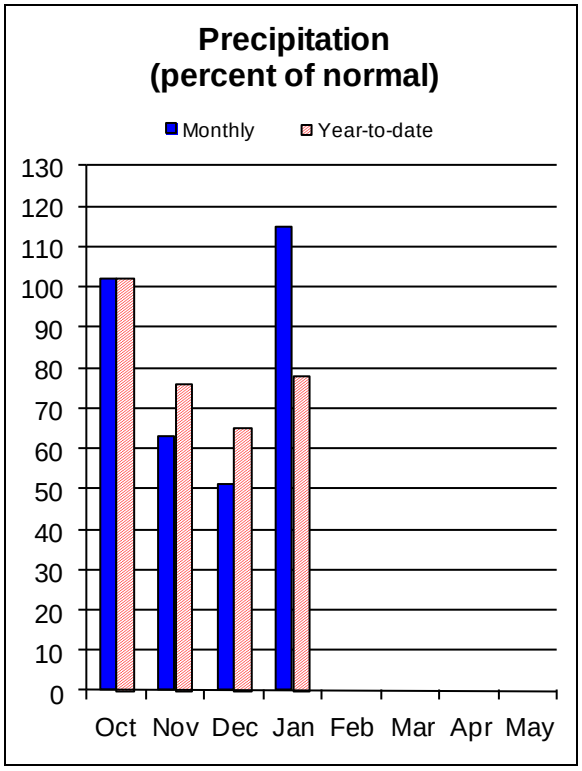


Umatilla, Walla Walla, Willow Rock, and Lower John Day Basins

February 1, 2012





Water Supply Outlook

The mid-January snow storm brought much needed improvement to the paltry snowpack in the mountains of northern Oregon. The snowpack in the Umatilla, Walla Walla, Willow, Rock and Lower John Day Basins rose from 51 percent of average last month to 76 percent of average, as of February 1. In addition to snow, much of the lower elevations were coated with a thick layer of ice that caused transportation problems, power outages, and school closures.

Precipitation for the month of January was 115 percent of average for the Umatilla, Walla Walla, Willow, Rock and Lower John Day basins. Since the beginning of water year 2012, precipitation in the basin has been 78 percent of average. While still below normal, this is a significant improvement from last month's report.

The February 1 storage at Cold Springs and MacKay reservoirs was 47 percent of average and 21 percent of capacity. Last year at this time, reservoir storage was 55 percent of capacity.

Streamflow forecasts in the basin increased slightly from last month's report. The April through September streamflow forecasts range from 61 percent of average for Butter Creek near Pine City to 89 percent of average for the Umatilla River above Meacham Creek. At this point in the season, water users in the basin can expect below normal streamflows for the summer of 2012.

For more information contact your local Natural Resources Conservation Service office:
Pendleton - (541) 278-8049; Heppner - (541) 676-5021; Condon - (541) 384-2671
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

UMATILLA, WALLA WALLA, WILLOW, ROCK AND LOWER JOHN DAY BASINS
Streamflow Forecasts - February 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Butter Ck nr Pine City	MAR-JUL	2.8	6.5	9.0	60	11.5	15.2	15.0
	APR-SEP	1.7	4.4	6.2	61	8.0	10.7	10.2
McKay Ck nr Pilot Rock	APR-SEP	1.4	12.5	20	74	28	39	27
Rhea Ck nr Heppner	FEB-JUL	1.4	5.1	7.7	57	10.3	14.0	13.5
Umatilla R ab Meacham Ck nr Gibbon	APR-JUL	43	55	65	89	73	85	73
	MAR-SEP	69	84	94	89	104	119	106
	APR-SEP	49	61	70	89	79	91	79
Umatilla R at Pendleton	APR-JUL	80	109	129	87	149	178	149
	MAR-SEP	143	177	200	87	225	255	230
	APR-SEP	85	115	135	87	155	185	155
SF Walla Walla R nr Milton-Freewater	APR-JUL	36	43	47	87	51	58	54
	MAR-SEP	58	66	72	89	78	86	81
	APR-SEP	47	54	59	88	64	71	67
Willow Ck ab Willow Ck Lake nr Heppn	FEB-JUL	1.9	5.3	7.6	57	9.9	13.2	13.3
	APR-JUL	0.2	2.6	4.3	58	6.0	8.4	7.4

UMATILLA, WALLA WALLA, WILLOW, ROCK AND LOWER JOHN DAY BASINS
Reservoir Storage (1000 AF) - End of January

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
COLD SPRINGS	50.0	6.3	13.5	21.4
MCKAY	73.8	19.9	54.9	34.1
WILLOW CREEK	1.8	4.5	0.6	---

UMATILLA, WALLA WALLA, WILLOW, ROCK AND LOWER JOHN DAY BASINS
Watershed Snowpack Analysis - February 1, 2012

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Walla Walla	4	112	86
Umatilla	7	86	80
McKay Creek	4	74	65

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table. The average is computed for the 1971-2000 base period.
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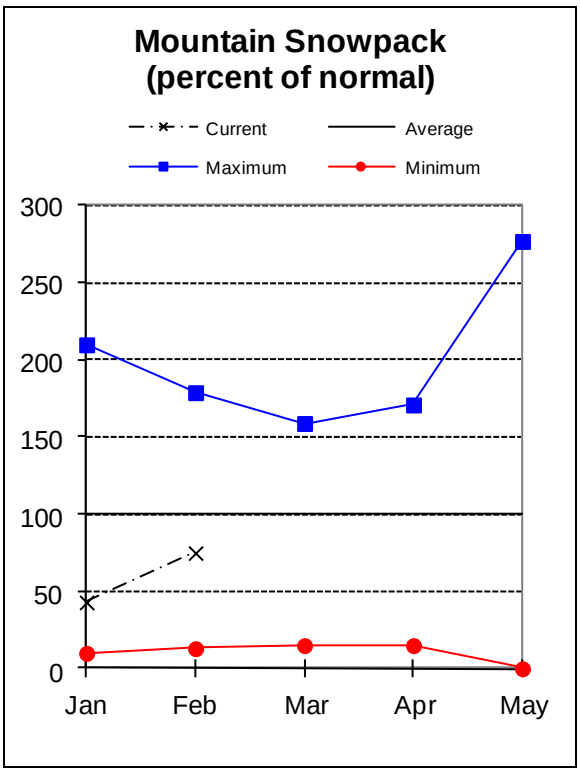
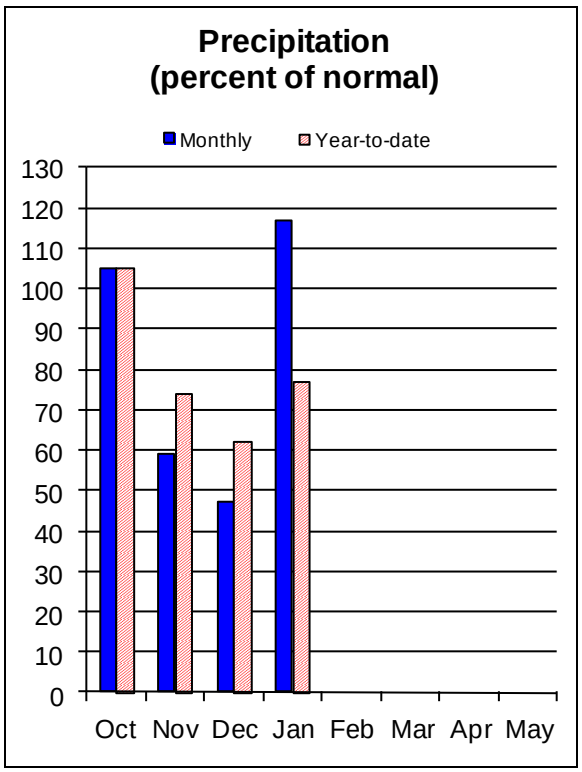
Upper John Day Basin

February 1, 2012





Water Supply Outlook

Water supply conditions in the Upper John Day basin improved during January, due to the mid-month storm. The snow water equivalent more than doubled at most SNOTEL sites in the basin during this storm. The Upper John Day basin snowpack rose from 43 percent of average last month to 75 percent of average as of February 1.

Precipitation for the month of January was 117 percent of average for the Upper John Day basin. Since the beginning of water year 2012, precipitation in the basin has been 77 percent of average. While still below normal, this is a significant improvement from last month's report.

Streamflow forecasts in the Upper John Day basin increased slightly from last month's report. The April through September streamflow forecasts range from 71 percent of average for Camas Creek near Ukiah and the Middle Fork John Day River at Ritter, to 100 percent of average for Strawberry Creek near Prairie City. At this point in the season, water users in the basin can expect below normal to near normal streamflows for the summer of 2012.

For more information contact your local Natural Resources Conservation Service office:
John Day - (541) 575-0135
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

UPPER JOHN DAY BASIN
Streamflow Forecasts - February 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Camas Ck nr Ukiah	MAR-JUL	21	31	37	71	43	53	52
	APR-SEP	12.0	21	27	71	33	42	38
MF John Day R at Ritter	MAR-JUL	60	92	113	71	134	166	159
	APR-SEP	45	72	91	71	110	137	128
NF John Day R at Monument	MAR-JUL	330	480	580	73	680	830	790
	APR-SEP	240	365	450	73	535	660	615
Mountain Ck nr Mitchell	FEB-JUL	2.4	4.6	6.1	87	7.6	9.8	7.0
	APR-SEP	1.3	2.9	4.0	87	5.1	6.7	4.6
Strawberry Ck nr Prairie City	MAR-JUL	4.8	6.4	7.4	100	8.4	10.0	7.4
	APR-SEP	5.1	6.7	7.8	100	8.9	10.5	7.8

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

UPPER JOHN DAY BASIN
Reservoir Storage (1000 AF) - End of January

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg

UPPER JOHN DAY BASIN
Watershed Snowpack Analysis - February 1, 2012

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
North Fork John Day	7	87	70
John Day above Kimberly	5	82	81

The average is computed for the 1971-2000 base period.
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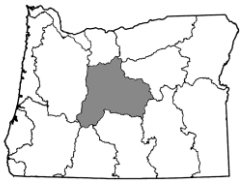
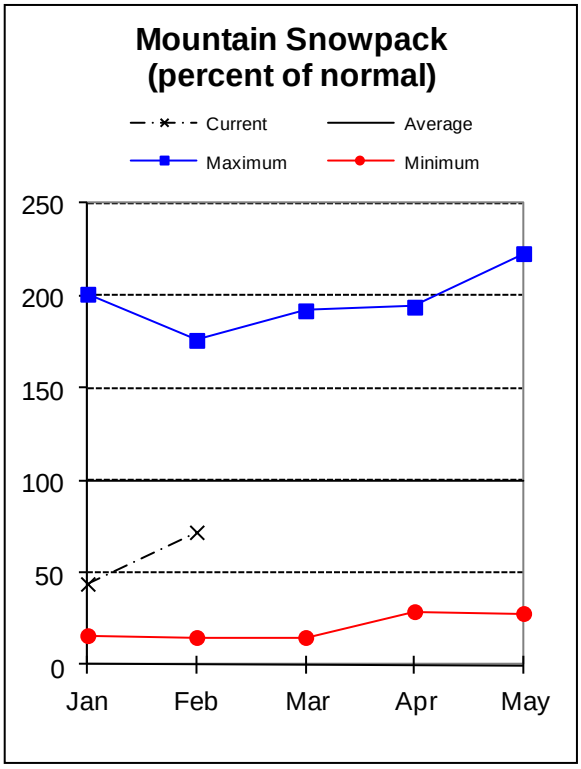
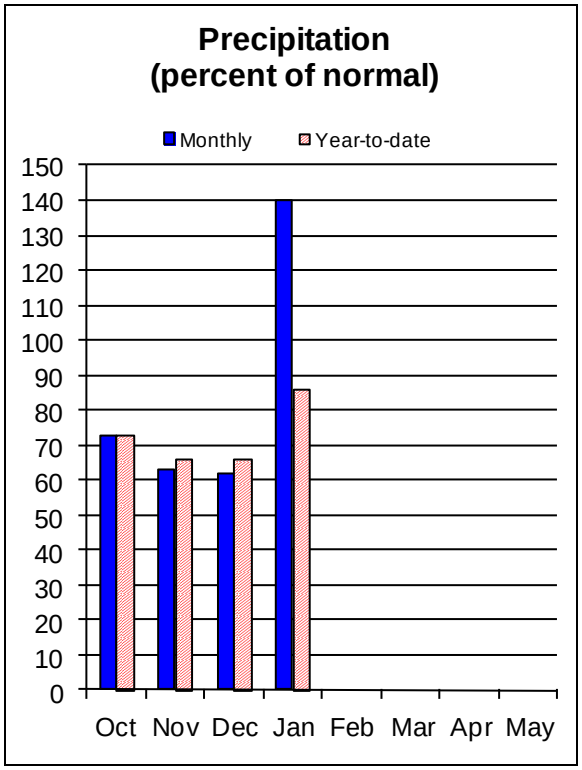
John Day - (541) 575-0135
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/



Upper Deschutes and Crooked Basins

February 1, 2012





Water Supply Outlook

For the first time in water year 2012, the Upper Deschutes and Crooked River basins experienced a month with above normal precipitation. Precipitation for the month of January was 140 percent of average. Since the beginning of water year 2012, precipitation in the basin has been 86 percent of average. While still below normal, this is a significant improvement from last month's report.

The mid-January storm brought much needed snow to the mountains of central Oregon. Before the storm, Ochoco Meadows SNOTEL was measuring a record low 0.9 inches of snow water equivalent. By the end of the month, the site had gained an additional 5 inches of snow water, and was above record low territory. As of February 1, the snowpack in the Upper Deschutes and Crooked River basins was 72 percent of average.

The February 1 storage at five irrigation reservoirs in the Upper Deschutes and Crooked River basins was 121 percent of average or 81 percent of capacity.

Streamflow forecasts in the Upper Deschutes and Crooked River basins increased markedly from last month's report. The April through September streamflow forecasts range from 75 percent of average for the Prineville Reservoir Inflow to 96 percent of average for the Deschutes River at Benham Falls. At this point in the season, water users in the basin can expect below normal to near normal streamflows for the summer of 2012.

For more information contact your local Natural Resources Conservation Service office:
Redmond (541) 923-4358
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

UPPER DESCHUTES AND CROOKED BASINS
Streamflow Forecasts - February 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Crane Prairie Reservoir Inflow (2)	FEB-JUL	59	69	76	97	83	93	78
	APR-JUL	42	49	54	92	59	66	59
	FEB-SEP	86	99	108	96	117	130	112
	APR-SEP	67	78	86	93	94	105	93
Crescent Ck nr Crescent (2)	FEB-JUL	11.9	18.5	23	100	27	34	23
	APR-JUL	7.9	13.0	16.5	96	20	25	17.2
	FEB-SEP	15.4	22	27	100	32	39	27
	APR-SEP	11.0	16.3	19.9	95	23	29	21
Deschutes R at Benham Falls nr Bend	FEB-JUL	425	465	490	98	515	555	500
	APR-JUL	300	320	335	96	350	370	350
	FEB-SEP	585	635	665	98	695	745	680
	APR-SEP	450	485	505	96	525	560	525
Deschutes R bl Snow Ck nr La Pine	FEB-JUL	30	38	43	96	48	56	45
	APR-JUL	22	27	31	94	35	40	33
	FEB-SEP	52	62	68	96	74	84	71
	APR-SEP	42	50	55	93	60	68	59
Little Deschutes R nr La Pine (2)	FEB-JUL	52	73	87	86	101	122	101
	APR-JUL	43	54	62	87	70	81	71
	FEB-SEP	57	79	95	86	111	133	110
	APR-SEP	46	60	69	86	78	92	80
Ochoco Reservoir Inflow (2)	FEB-JUL	14.5	24	31	72	38	48	43
	APR-JUL	9.0	14.8	18.8	86	23	29	22
	FEB-SEP	13.7	24	31	72	38	48	43
	APR-SEP	8.5	14.6	18.8	86	23	29	22
Prineville Reservoir Inflow (2)	FEB-JUL	56	117	158	72	199	260	221
	APR-JUL	23	58	82	76	106	141	108
	FEB-SEP	54	116	158	71	200	260	222
	APR-SEP	21	57	82	75	107	143	109

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Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>>					30-Yr Avg. (1000AF)
		Chance Of Exceeding *					
		90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	
Whychus Ck nr Sisters	FEB-JUL	33	37	40	93	43	47	43
	APR-JUL	28	30	32	89	34	36	36
	FEB-SEP	41	46	50	93	54	59	54
	APR-SEP	37	41	43	88	45	49	49

UPPER DESCHUTES AND CROOKED BASINS
Reservoir Storage (1000 AF) - End of January

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
CRANE PRAIRIE	55.3	44.6	38.8	39.6
CRESCENT LAKE	86.9	84.0	69.6	49.1
OCHOCO	47.5	27.1	30.6	21.0
PRINEVILLE	153.0	93.5	98.7	90.0
WICKIUP	200.0	188.3	165.6	161.6

UPPER DESCHUTES AND CROOKED BASINS
Watershed Snowpack Analysis - February 1, 2012

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Crooked	3	75	75
Little Deschutes	4	71	73
Deschutes above Wickiup R	4	67	67
Tumalo and Squaw Creeks	5	91	77

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

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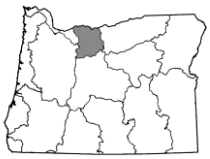
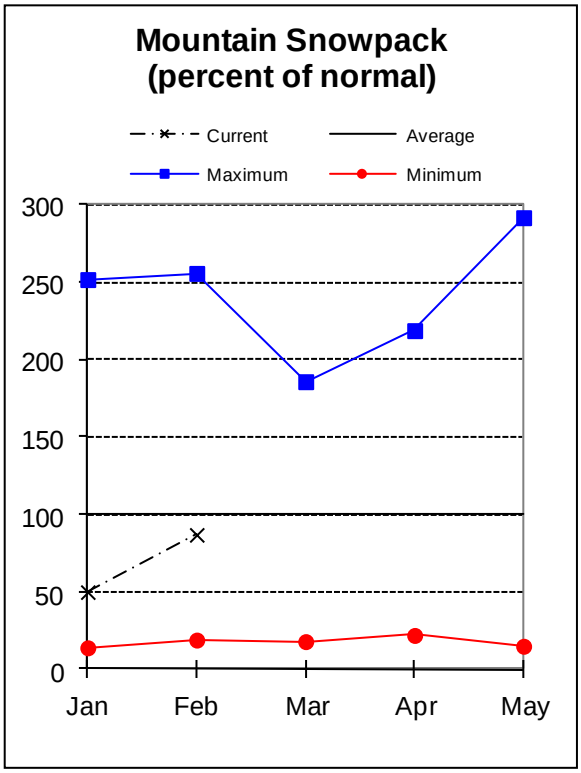
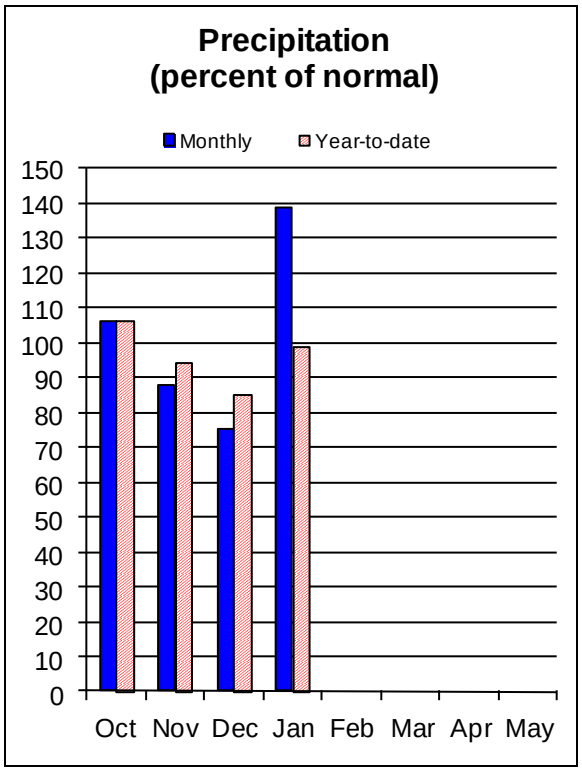


Hood, Mile Creeks, and Lower Deschutes Basins

February 1, 2012





Water Supply Outlook

It was a very dramatic month for northwestern Oregon. After a dry start to the month, the mid-January storm brought significant mountain snow and valley rains. Red Hill, North Fork, and Blazed Alder SNOTEL sites all recorded over 10 inches of precipitation during the epic storm from January 17 to January 21. Precipitation for the month of January was 139 percent of average. Since the beginning of water year 2012, precipitation in the basin has been 99 percent of average, the highest in the state.

As of February 1, the snowpack in the Hood, Mile Creeks and Lower Deschutes basins was 87 percent of average, the highest in the state. This was almost a 40 percent increase from the January 1 snowpack conditions in the basin.

Streamflow forecasts in the Hood, Mile Creeks and Lower Deschutes basin increased markedly from last month's report. The April through September streamflow for Hood River at Tucker Bridge is forecast to be 96 percent of average. At this point in the season, water users in the Hood, Mile Creeks and Lower Deschutes basin can expect near normal streamflows during the summer of 2012.

For more information contact your local Natural Resources Conservation Service office:
The Dalles (541) 296-6178
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

HOOD, MILE CREEKS AND LOWER DESCHUTES BASINS
Streamflow Forecasts - February 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
WF Hood River nr Dee	APR-JUL	77	99	114	94	129	151	121
Hood R At Tucker Bridge	APR-JUL	169	200	220	97	240	270	228
	APR-SEP	205	240	260	96	280	315	271

HOOD, MILE CREEKS AND LOWER DESCHUTES BASINS
Reservoir Storage (1000 AF) - End of January

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
CLEAR LAKE (WASCO)	11.9	4.8	3.8	3.7

HOOD, MILE CREEKS AND LOWER DESCHUTES BASINS
Watershed Snowpack Analysis - February 1, 2012

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
Hood River	7	125	87
Mile Creeks	2	134	91
White River	5	135	91

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

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(2) - The value is natural volume - actual volume may be affected by upstream water management.

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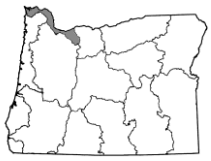
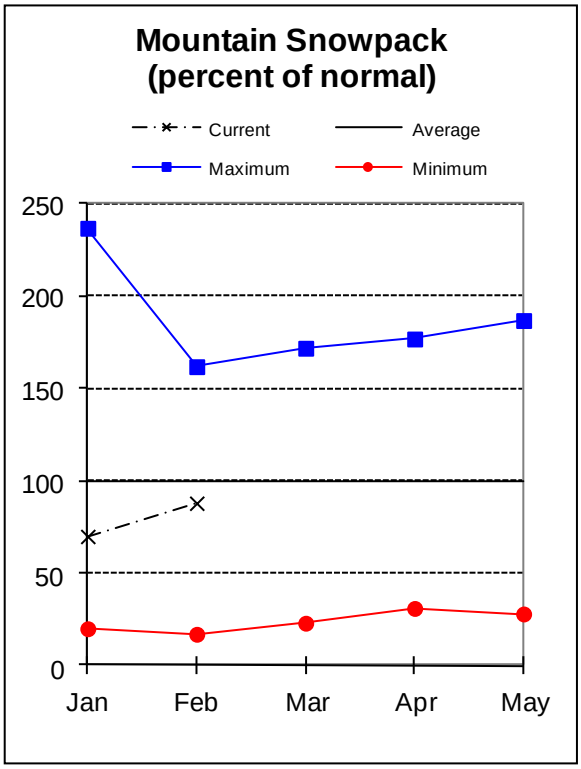
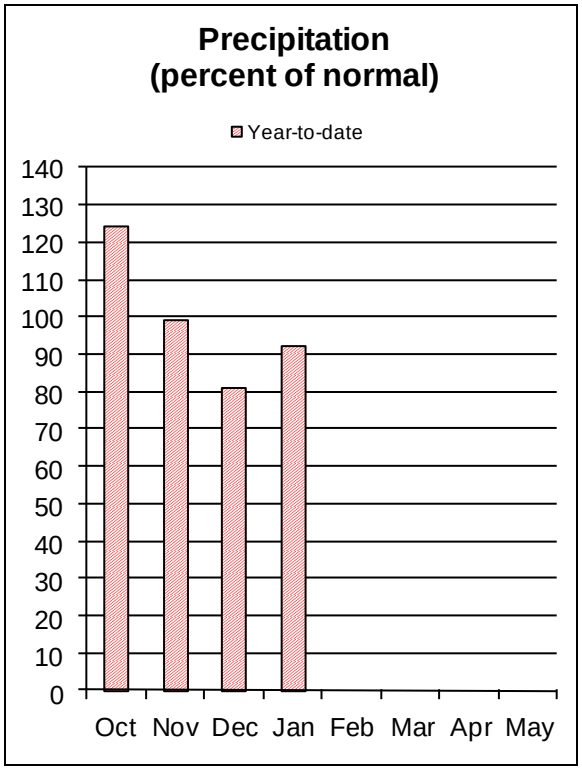


Lower Columbia Basin

February 1, 2012





Water Supply Outlook

On February 1, the snowpack in the Columbia River basin was 88 percent of average, as measured by 237 SNOTEL sites in the US portion of the basin. This was a significant increase from January 1. The Canadian portion of the Columbia basin has had much higher snowfall this winter, so the snowpack north of the border remains above average as of February 1.

Precipitation in the US portion of the basin since October 1 has been 92 percent of average. Locally, precipitation since October 1 in the Sandy basin has been 99 percent of average.

In the local area, streamflow forecasts have increased slightly from last month's report. Both the Columbia River at The Dalles and the Sandy River near Marmot are forecast to be 92 percent of average for the April through September period.

For more information contact your local Natural Resources Conservation Service office:
Oregon City - (503) 656-3499
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

LOWER COLUMBIA BASIN
Streamflow Forecasts - February 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Columbia R at The Dalles (2)	APR-JUL	66000	69300	75400	89	81500	87500	84600
	APR-SEP	80300	83300	90400	92	97500	102000	98600
Sandy R nr Marmot	APR-JUL	220	260	290	93	320	360	313
	APR-SEP	260	305	335	92	365	410	363

LOWER COLUMBIA BASIN
Reservoir Storage (1000 AF) - End of January

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg

LOWER COLUMBIA BASIN
Watershed Snowpack Analysis - February 1, 2012

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Sandy	7	132	91

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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(2) - The value is natural volume - actual volume may be affected by upstream water management.

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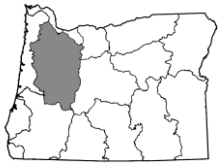
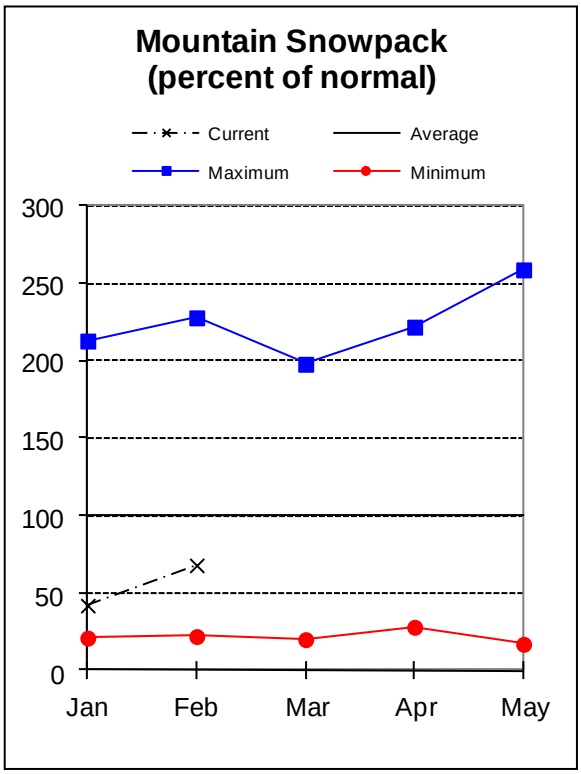
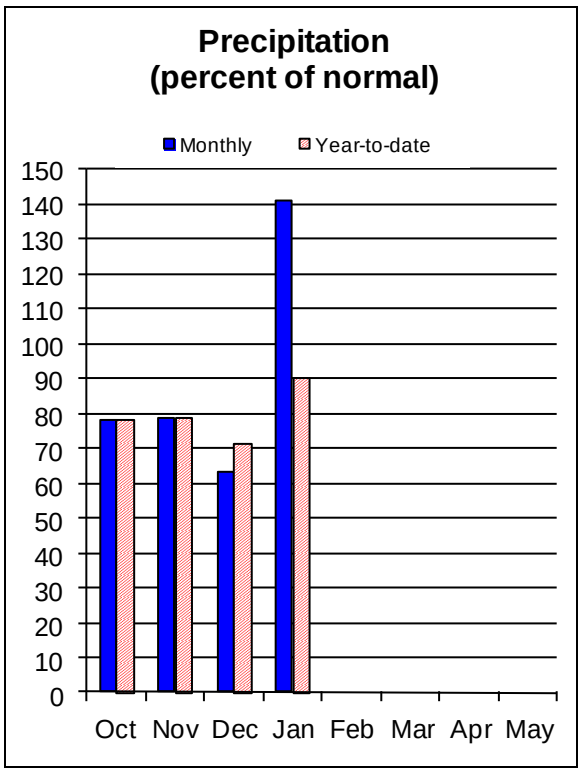


Willamette Basin

February 1, 2012





Water Supply Outlook

The epic storm that pounded western Oregon in mid-January had the biggest impact in the mid- and southern Willamette Valley. Four-day storm precipitation totals were over 10 inches for Marion Forks, Jump Off Joe, Little Meadows, and Bear Grass SNOTEL sites. Warm rains melted fresh snow at lower elevations, which exacerbated the extensive flooding on unregulated tributaries, such as the Luckiamute River and Marys River. However, the meager snowpack conditions in the mountains were greatly augmented by this storm. As of February 1, the Willamette basin snowpack was 68 percent of average.

Precipitation for the month of January was 141 percent of average. Since October 1, precipitation in the basin has been 90 percent of average. While still below normal, this is a significant improvement from last month's report.

The February 1 storage at Timothy Lake and Henry Hagg reservoirs was 115 percent of average and 86 percent of capacity.

The April through September streamflow forecasts for the Willamette basin range from 78 percent of average for Fern Ridge Lake Inflow to 99 percent of average for Dorena Lake Inflow. At this point in the season, water users in the Willamette basin can expect below normal to near normal streamflows during the summer of 2012.

For more information contact your local Natural Resources Conservation Service office:
Eugene - (541) 465-6436; Portland - (503) 231-2270; Tangent - (541) 967-5925; Oregon City - (503) 656-3499;
Hillsboro - (503) 648-3174; McMinnville - (503) 472-1474
Salem - (503) 399-5746; Dallas - (503) 623-5534
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

WILLAMETTE BASIN
Streamflow Forecasts - February 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Blue Lake Inflow (1,2)	FEB-MAY	87	130	150	92	170	215	163
	APR-JUL	41	67	79	92	91	117	86
	APR-SEP	43	68	80	93	92	117	86
Clackamas R at Estacada	APR-JUL	480	565	620	97	675	760	640
	APR-SEP	575	660	720	96	780	865	748
Clackamas R ab Three Lynx (2)	APR-JUL	360	415	455	96	495	550	474
	APR-SEP	435	495	540	96	575	635	562
Cottage Grove Lake Inflow (1,2)	FEB-MAY	38	66	79	91	92	120	87
	APR-JUL	7.5	28	37	91	46	67	41
	APR-SEP	9.3	30	39	91	48	69	43
Cougar Lake Inflow (1,2)	FEB-MAY	175	235	265	93	295	355	285
	APR-JUL	128	171	190	93	210	250	204
	APR-SEP	152	195	215	94	235	280	230
Detroit Lake Inflow (1,2)	FEB-MAY	520	660	720	97	780	920	744
	APR-JUL	330	455	510	97	565	690	528
	APR-SEP	405	535	595	97	655	785	616
Dorena Lake Inflow (1,2)	FEB-MAY	135	220	255	100	290	375	255
	APR-JUL	48	105	131	100	157	215	131
	APR-SEP	52	110	136	99	162	220	137
Fall Creek Lake Inflow (1,2)	FEB-MAY	103	160	185	94	210	265	197
	APR-JUL	33	74	93	88	112	153	106
	APR-SEP	38	80	99	88	118	160	112
Fern Ridge Lake Inflow (1,2)	FEB-MAY	39	111	144	80	177	250	180
	APR-JUL	-1.8	26	38	78	50	78	49
	APR-SEP	-1.7	26	39	78	52	80	50

For more information contact your local Natural Resources Conservation Service office:
Eugene - (541) 465-6436; Portland - (503) 231-2270; Tangent - (541) 967-5925; Oregon City - (503) 656-3499; Hillsboro - (503) 648-3174; McMinnville - (503) 472-1474
Salem - (503) 399-5746; Dallas - (503) 623-5534
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Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>>				
		Chance Of Exceeding *				
		90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Foster Lake Inflow (1,2)	FEB-MAY	630	715	755	86	795	880	878
	APR-JUL	335	395	420	86	445	505	490
	APR-SEP	370	430	455	86	480	540	527
Green Peter Lake Inflow (1,2)	FEB-MAY	335	465	525	87	585	715	604
	APR-JUL	145	240	280	86	320	415	327
	APR-SEP	169	265	305	86	345	440	354
Hills Creek Reservoir Inflow (1,2)	FEB-MAY	199	305	350	90	395	500	388
	APR-JUL	137	210	240	87	270	345	277
	APR-SEP	165	240	275	86	310	385	320
Little North Santiam R nr Mehama (1)	APR-JUL	74	112	129	97	146	184	133
	APR-SEP	82	120	138	97	156	194	143
Lookout Point Lake Inflow (1,2)	FEB-MAY	535	795	915	89	1030	1300	1025
	APR-JUL	360	550	635	88	720	910	726
	APR-SEP	415	625	720	87	815	1030	828
MF Willamette R bl NF (1,2)	FEB-MAY	505	805	900	93	1080	1370	973
	APR-JUL	270	495	600	86	705	930	698
	APR-SEP	320	570	685	86	800	1050	798
McKenzie R bl Trail Bridge (2)	FEB-MAY	215	250	270	92	290	325	294
	APR-JUL	200	225	240	90	255	280	266
	APR-SEP	280	310	355	88	350	380	404
McKenzie R nr Vida (1,2)	FEB-MAY	830	1060	1200	93	1280	1510	1295
	APR-JUL	700	860	935	96	1010	1170	977
	APR-SEP	880	1060	1140	95	1220	1400	1201
Mohawk R nr Springfield	FEB-JUL	124	167	196	100	225	270	196
Oak Grove Fork Of Clackamas	APR-JUL	90	106	119	92	128	144	130
	APR-SEP	118	138	154	92	164	184	167

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Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
North Santiam R at Mehama (1,2)	FEB-MAY	755	990	1100	96	1210	1450	1150
	APR-JUL	475	630	700	96	770	925	732
	APR-SEP	570	730	800	96	870	1030	834
South Santiam R at Waterloo (2)	FEB-MAY	475	635	740	97	845	1000	762
	APR-JUL	340	450	525	96	600	710	549
	APR-SEP	385	490	565	96	640	745	587
Scoggins Ck nr Gaston (2)	FEB-JUL	19.9	31	38	88	45	56	43
Willamette R at Salem (1,2)	FEB-MAY	4790	6620	7450	95	8280	10100	7837
	APR-JUL	2590	3630	4100	94	4570	5610	4347
	APR-SEP	2980	4040	4520	94	5000	6060	4804

WILLAMETTE BASIN
Reservoir Storage (1000 AF) - End of January

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BLUE RIVER	85.5	15.8	3.5	6.0
COTTAGE GROVE	29.8	3.5	3.9	3.6
COUGAR	155.2	56.0	16.6	77.6
DETROIT	300.7	255.9	27.4	69.0
DORENA	70.5	15.1	11.0	11.8
FALL CREEK	115.5	21.7	1.4	7.1

WILLAMETTE BASIN
Watershed Snowpack Analysis - February 1, 2012

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Clackamas	4	134	82
McKenzie	8	95	62
Row River	1	55	25
Santiam	6	125	65
Middle Fork Willamette	7	73	64

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Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg	Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
FERN RIDGE	109.6	50.9	2.3	18.6				
FOSTER	29.7	24.0	1.7	4.9				
GREEN PETER	268.2	271.6	9.1	91.2				
HILLS CREEK	200.2	98.4	28.8	71.3				
LOOKOUT POINT	337.0	209.8	68.5	41.8				
TIMOTHY LAKE	61.7	56.0	51.9	49.9				
HENRY HAGG LAKE	53.0	42.6	39.4	36.2				

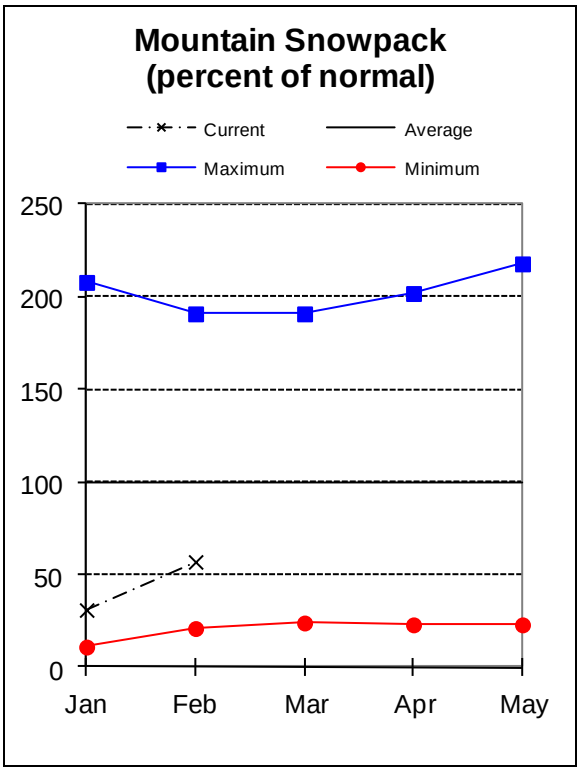
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

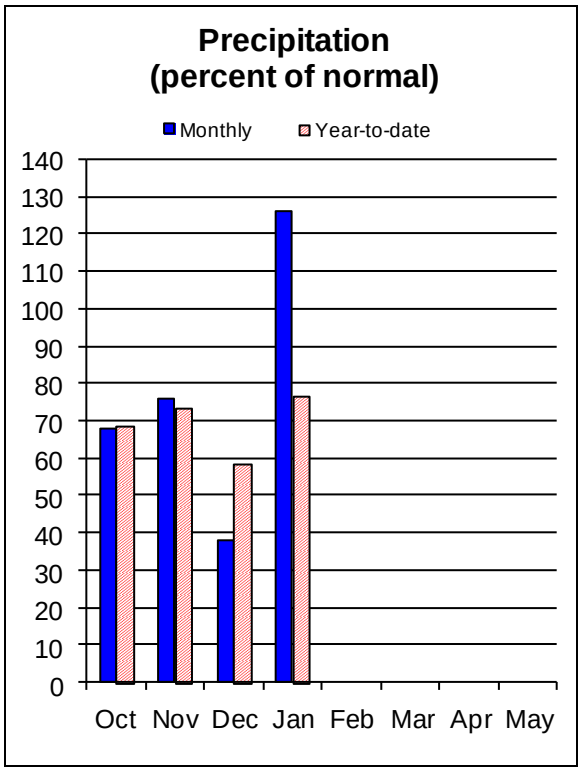
The average is computed for the 1971-2000 base period.
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

For more information contact your local Natural Resources Conservation Service office:
Eugene - (541) 465-6436; Portland - (503) 231-2270; Tangent - (541) 967-5925; Oregon City - (503) 656-3499; Hillsboro - (503) 648-3174; McMinnville - (503) 472-1474
Salem - (503) 399-5746; Dallas - (503) 623-5534
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

Rogue and Umpqua Basins

February 1, 2012





Water Supply Outlook

After a very dry start to winter in the Rogue and Umpqua basins, the mid-January storm brought significant moisture to the basin. For the first time this water year, the Rogue and Umpqua basins experienced a month with above normal precipitation. Precipitation for January was 126 percent of average in the basin. Since October 1, precipitation in the basin has been 76 percent of average. While still below normal, this is a significant improvement from last month's report.

The mid-January storm brought much needed snow to the mountains of southwestern Oregon. Before the storm, Billie Creek and Fourmile Lake SNOTEL sites were both measuring record low snow water equivalent. Previous record lows at both sites were set over 30 years ago. By the end of the month, the sites had gained significant snow and were both back above 60 percent of average. Despite recent gains, the snowpack in the Rogue and Umpqua basins remains well below normal. As of February 1, the basin snowpack was 57 percent of average.

The February 1 storage at 5 irrigation reservoirs in the Rogue and Umpqua basin was 114 percent of average and 70 percent of capacity.

As of February 1, streamflows in the Rogue and Umpqua basins are forecast to be well below to slightly below normal for the summer of 2012. The April through September streamflow forecasts for the basin range from 56 percent of average for Applegate Lake Inflow to 91 percent of average for the North Fork Little Butte Creek near Lakecreek. Elsewhere in the basin, the South Umpqua at Tiller is forecast to be 78 percent of average the same period.

For more information contact your local Natural Resources Conservation Service office:
Roseburg - (541) 673-8316; Medford - (541) 776-4267
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

ROGUE AND UMPQUA BASINS
Streamflow Forecasts - February 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Applegate Lake Inflow (2)	FEB-JUL	18.0	79	121	59	163	225	205
	APR-JUL	13.0	43	63	56	83	113	112
	FEB-SEP	23	85	127	59	169	230	215
	APR-SEP	15.0	46	67	56	88	119	119
SF Big Butte Ck nr Butte Falls	APR-JUL	13.6	21	26	77	31	38	34
	APR-SEP	18.4	27	33	76	39	48	44
Cow Ck nr Azalea (2)	FEB-JUL	2.5	18.9	30	71	41	57	42
	APR-JUL	0.5	7.1	11.6	70	16.1	23	16.5
	APR-SEP	0.7	7.6	12.3	70	17.0	24	17.7
Hyatt Prairie Reservoir Inflow (2)	APR-JUL	0.5	1.2	2.4	50	3.6	5.4	4.8
Illinois R at Kerby	APR-JUL	19.0	83	127	71	171	235	179
	APR-SEP	22	87	131	70	175	240	186
NF Little Butte Ck nr Lakecreek (2)	APR-JUL	19.0	25	29	91	33	39	32
	APR-SEP	29	37	42	91	47	55	46
Lost Creek Lake Inflow (2)	FEB-JUL	475	585	660	80	735	845	825
	APR-JUL	300	375	425	80	475	550	530
	FEB-SEP	560	680	765	80	850	970	960
	APR-SEP	390	475	535	81	595	680	665
Rogue R at Raygold (2)	APR-JUL	285	430	530	73	630	775	730
	APR-SEP	385	540	645	73	750	905	890
Rogue R at Grants Pass (2)	APR-JUL	290	455	565	76	675	840	740
	APR-SEP	365	545	665	75	785	965	885
Sucker Ck bl Ltl Grayback Ck nr Holl	APR-JUL	12.1	24	32	62	40	52	52
	APR-SEP	14.6	27	35	63	43	55	56
North Umpqua R at Winchester	APR-JUL	450	600	700	88	800	950	795
	APR-SEP	545	705	810	88	915	1070	920

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Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
South Umpqua R nr Brockway	APR-JUL	105	225	310	78	395	515	400
	APR-SEP	115	240	325	77	410	535	420
South Umpqua R at Tiller	APR-JUL	66	117	152	79	187	240	193
	APR-SEP	73	125	160	78	195	245	205

ROGUE AND UMPQUA BASINS
Reservoir Storage (1000 AF) - End of January

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
APPLEGATE	75.2	14.0	12.3	12.7
EMIGRANT LAKE	39.0	22.4	24.7	21.9
FISH LAKE	8.0	6.2	4.0	5.3
FOURMILE LAKE	16.1	11.1	7.8	9.0
HOWARD PRAIRIE	60.0	44.2	40.2	39.1
HYATT PRAIRIE	16.1	13.7	13.5	10.2
LOST CREEK	315.0	183.5	29.5	162.0

ROGUE AND UMPQUA BASINS
Watershed Snowpack Analysis - February 1, 2012

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Applegate	5	67	54
Bear Creek	5	76	60
Little Butte Creek	6	71	57
Illinois	2	28	28
North Umpqua	7	89	54
Rogue River above Grants	21	69	60

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.
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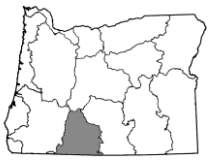
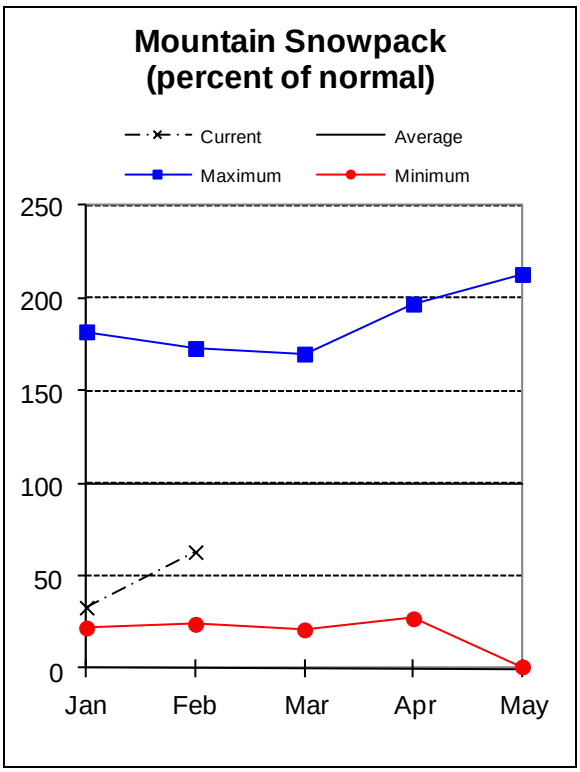
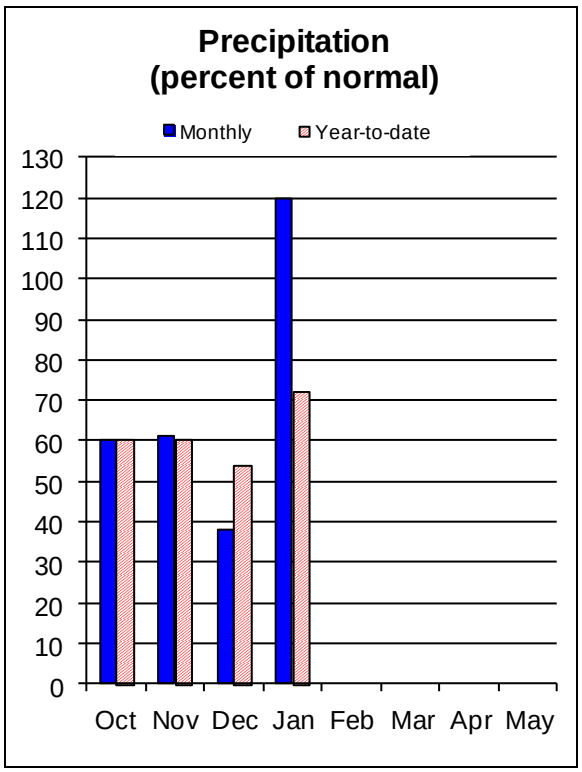


Klamath Basin

February 1, 2012





Water Supply Outlook

After a long hiatus from significant snowfall in the Klamath basin, the mid-January storm brought much needed snow to the region. The snow water equivalent more than doubled at most SNOTEL sites in the basin during this storm. Last month, the basin snowpack was only 33 percent of average. By February 1, the basin snowpack had risen to 63 percent of average. While conditions have improved, the snowpack remains well below normal for this time of year.

For the first time this water year, the Klamath basin experienced a month with above normal precipitation. Precipitation for the month of January was 120 percent of average. Since the beginning of water year 2012, precipitation in the basin has been 72 percent of average. While still below normal, this is a significant improvement from last month's report.

The February 1 storage at Upper Klamath Lake, Clear Lake (CA) and Gerber reservoirs was 81 percent of average and 44 percent of capacity.

As of February 1, streamflows in the Klamath basin are forecast to be well below normal for the summer of 2012. The April through September streamflow forecasts for the basin range from 52 percent of average for the Sprague River near Chiloquin to 62 percent of average for Gerber Reservoir Inflow and the Williamson River below Sprague. At this point in the season, water users in the basin can expect well below normal streamflows for the summer of 2012.

For more information contact your local Natural Resources Conservation Service office:
Klamath Falls - (541) 883-6932
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

KLAMATH BASIN
Streamflow Forecasts - February 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Clear Lake Inflow (2)	FEB-JUL	2.0	40	65	62	90	128	105
	APR-SEP	3.8	18.2	28	58	38	52	48
Gerber Res Inflow (2)	FEB-JUL	2.4	18.8	30	64	41	58	47
	APR-SEP	0.7	4.7	11.0	62	17.3	26	17.8
Sprague R nr Chiloquin	FEB-JUL	51	125	175	54	225	300	325
	FEB-SEP	60	137	190	54	245	320	350
	APR-SEP	35	86	120	52	154	205	230
Upper Klamath Lake Inflow (1)	FEB-JUL	220	415	490	63	595	790	780
	FEB-SEP	220	435	530	61	625	840	875
	APR-SEP	131	250	305	59	360	480	515
Williamson R bl Sprague R nr Chiloqu	FEB-JUL	177	270	330	64	390	485	520
	FEB-SEP	199	295	360	62	425	520	580
	APR-SEP	136	198	240	62	280	345	385

KLAMATH BASIN
Reservoir Storage (1000 AF) - End of January

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
CLEAR LAKE (CALIF)	513.3	120.4	73.1	207.8
GERBER	94.3	43.1	27.4	46.9
UPPER KLAMATH LAKE	523.7	328.7	400.9	354.6

KLAMATH BASIN
Watershed Snowpack Analysis - February 1, 2012

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Lost	3	55	42
Sprague	9	72	60
Upper Klamath Lake	7	72	64
Williamson River	5	76	72

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table. The average is computed for the 1971-2000 base period.
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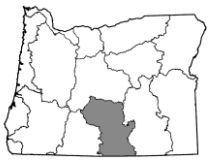
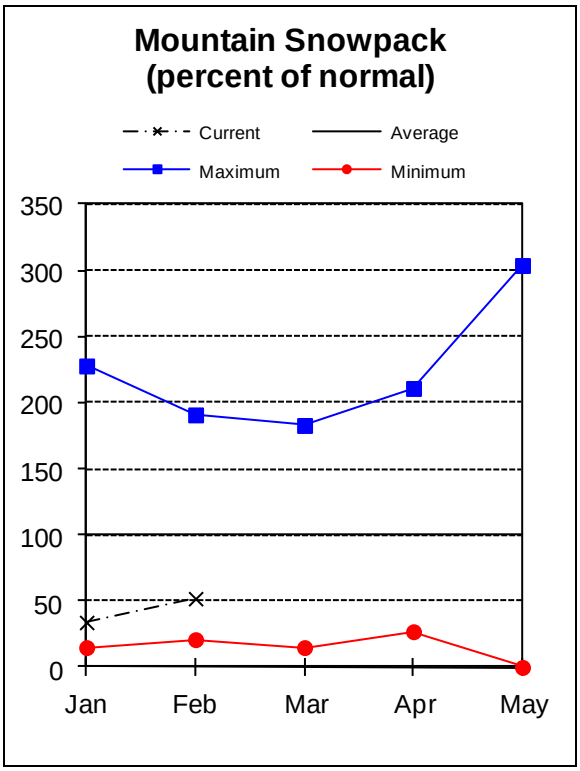
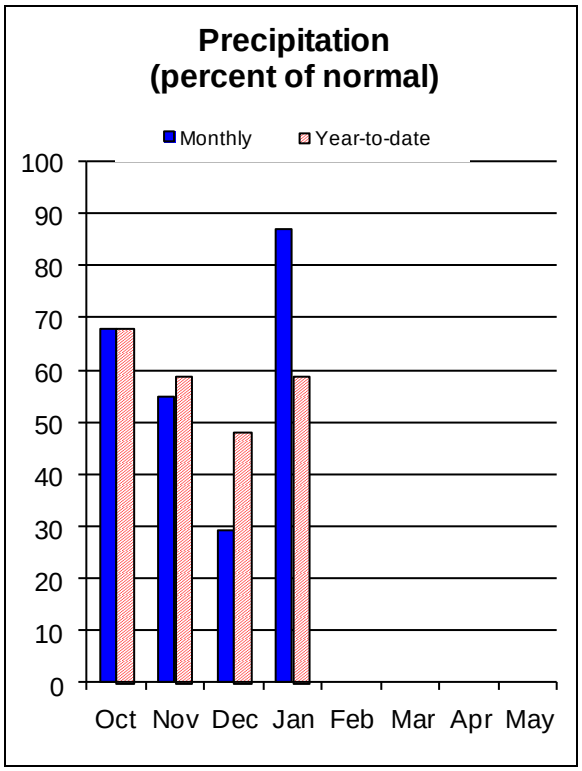


Lake County and Goose Lake

February 1, 2012





Water Supply Outlook

So far, this has been a very poor year for snow in the Lake County and Goose Lake basins. In all but the highest elevations, snow has been scarce across the basin this winter. The mid-January storm brought some new snow, but this region didn't get as much of a boost in comparison to the rest of the state. The aerial marker survey indicated that snow coverage in the basin is spotty. Many aerial markers that typically have snow on the February 1 survey had only a skiff of snow or were completely bare this month. As of February 1, the snowpack in the Lake County and Goose Lake basins was 52 percent of average, the lowest in the state.

January precipitation was 87 percent of average for the Lake County and Goose Lake basins. It was the only part of the state that wasn't wetter than normal for the month. Since October 1, precipitation in the basin has been 59 percent of average, the lowest in the state.

Reservoir storage in the Lake County and Goose Lake basins remains above average, which may provide some relief from low water supply conditions. February 1 storage at Cottonwood and Drews reservoirs was 119 percent of average and 60 percent of capacity.

As of February 1, streamflows in the Lake County and Goose Lake basins are still forecast to be well below normal for the summer of 2012. The April through September streamflow forecasts for the basin range from 54 percent of average for Deep Creek above Adel to 75 percent of average for Twentymile Creek near Adel. At this point in the season, water users in the basin can expect well below normal streamflows for the summer of 2012.

For more information contact your local Natural Resources Conservation Service office:
Lakeview - (541) 947-2202
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

LAKE COUNTY AND GOOSE LAKE BASINS
Streamflow Forecasts - February 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Chewaucan R nr Paisley	MAR-JUL	25	43	55	62	67	85	89
	APR-SEP	22	37	48	62	59	74	78
Deep Ck ab Adel	MAR-JUL	12.6	32	45	54	58	77	84
	APR-SEP	10.5	26	37	54	48	64	69
Honey Ck nr Plush	MAR-JUL	2.5	9.6	14.5	73	19.4	27	20
	APR-SEP	1.7	7.8	12.0	72	16.2	22	16.6
Silver Ck nr Silver Lake (2)	MAR-JUL	1.6	6.5	9.2	63	13.3	18.2	14.6
	APR-SEP	1.1	3.5	7.1	63	10.7	16.0	11.2
Twentymile Ck nr Adel	MAR-JUL	2.8	11.8	21	75	30	44	28
	APR-SEP	1.7	6.2	13.0	75	19.8	30	17.4

LAKE COUNTY AND GOOSE LAKE BASINS
Reservoir Storage (1000 AF) - End of January

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
COTTONWOOD	8.7	3.2	5.0	3.1
DREWS	63.0	39.8	20.7	33.1

LAKE COUNTY AND GOOSE LAKE BASINS
Watershed Snowpack Analysis - February 1, 2012

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
Chewaucan River	6	73	54
Deep Creek	3	33	28
Drew Creek	4	66	42
Honey Creek	3	77	39
Silver Creek (Lake Co.)	5	77	69
Twentymile Creek	5	22	25

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table. The average is computed for the 1971-2000 base period.
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

For more information contact your local Natural Resources Conservation Service office:
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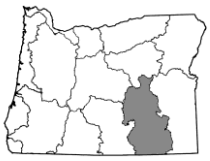
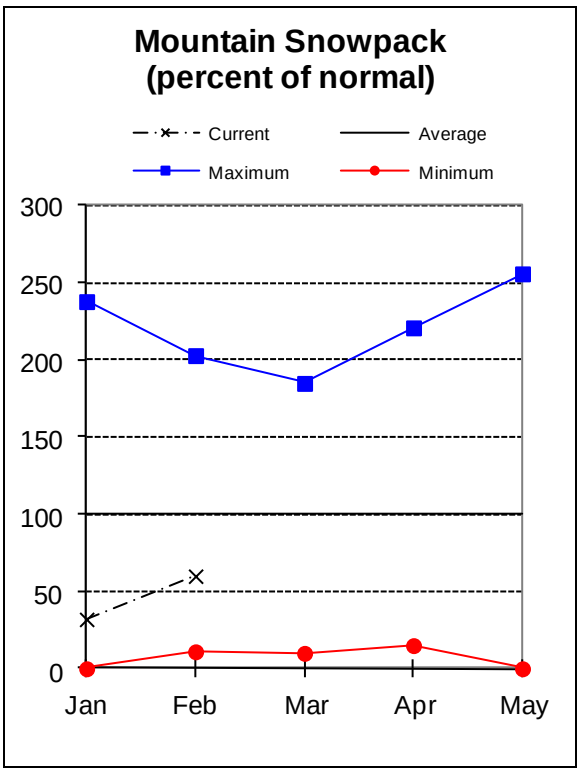
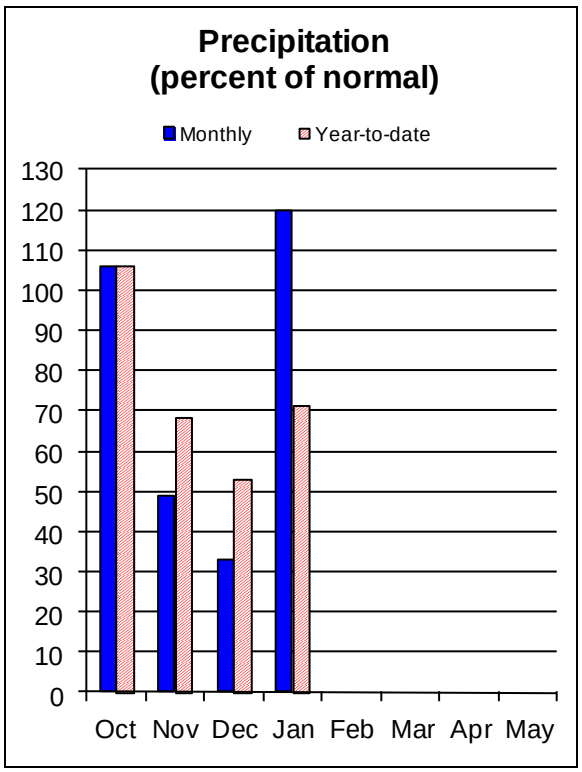


Harney Basin

February 1, 2012





Water Supply Outlook

The mid-January storm brought much needed snow to the Harney basin. The snow water equivalent more than doubled at many SNOTEL sites in the basin during this storm. Last month, the Harney basin snowpack was only 32 percent of average. By February 1, the basin snowpack had risen to 60 percent of average. While conditions improved during January, the snowpack remains well below normal for this time of year.

Precipitation for the month of January was 120 percent of average in the Harney basin. Since the beginning of water year 2012, precipitation in the basin has been 71 percent of average. While still below normal, this is a significant improvement from last month's report.

As of February 1, streamflows in the Harney basin are forecast to be well below normal for the summer of 2012. The April through September streamflow forecasts in the basin range from 41 percent of average for Trout Creek near Denio to 74 percent of average for the Silvies River near Burns. At this point in the season, water users in the basin can expect well below normal streamflows for the summer of 2012.

For more information contact your local Natural Resources Conservation Service office:
Hines - (541) 573-6446
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

HARNEY BASIN
Streamflow Forecasts - February 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Donner Und Blitzen R nr Frenchglen	MAR-JUL	22	41	53	71	65	84	75
	APR-SEP	18.4	37	49	70	61	80	70
Silvies R nr Burns	MAR-JUL	20	65	95	74	125	170	129
	APR-SEP	18.1	51	73	74	95	128	99
Trout Ck nr Denio	MAR-JUL	0.9	2.5	4.7	42	6.9	10.1	11.1
	APR-SEP	0.8	2.0	4.2	41	6.4	9.7	10.3

HARNEY BASIN
Reservoir Storage (1000 AF) - End of January

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg

HARNEY BASIN
Watershed Snowpack Analysis - February 1, 2012

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Donner und Blitzen River	5	31	38
Silver Creek (Harney Co.)	2	63	70
Silvies River	6	81	79
Trout Creek	6	39	42

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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Recession Flow Forecasts

Recession flow forecasts are presented below for key streamflow sites where reliable, daily streamflow data are available. The recession flow forecasts use exceedance probabilities in a format similar to the standard water supply forecasts presented in this document. Each forecast provides a range of possible outcomes representing the uncertainty of forecasting models.

The types of forecasts in the table below are:
1) Threshold flow -- Date that the daily streamflow rate falls below the given threshold flow
2) Peak flow -- Maximum daily flow
3) Date of peak flow -- Date of occurrence of maximum daily flow
4) Average daily flow on a given date

OWYHEE AND MALHEUR BASINS					
FORECAST POINT	*FORECAST THRESHOLD*	*FORECAST VALUE ---------- CHANCE OF EXCEEDING ----------*			*LONG-TERM AVERAGE VALUE*
		90%	*50%*	*10%*	
Owyhee R nr Rome	2000 cfs	Mar 01	Apr 11	May 22	**May 6**
Owyhee R nr Rome	1000 cfs	Mar 01	Apr 13	May 26	**May 18**
Owyhee R nr Rome	500 cfs	Mar 19	Apr 29	Jun 09	**Jun 2**

UPPER JOHN DAY BASIN					
FORECAST POINT	*FORECAST THRESHOLD*	*FORECAST VALUE ---------- CHANCE OF EXCEEDING ----------*			*LONG-TERM AVERAGE VALUE*
		90%	*50%*	*10%*	
John Day R at Service Creek	Average Daily Flow on Aug. 1st	41	192	415	**271**

UPPER DESCHUTES AND CROOKED BASINS					
FORECAST POINT	*FORECAST THRESHOLD*	*FORECAST VALUE ---------- CHANCE OF EXCEEDING ----------*			*LONG-TERM AVERAGE VALUE*
		90%	*50%*	*10%*	
Crane Prairie Inflow*	Date of Peak	May 9*	May 25*	Jun 10*	**May 25**
Crane Prairie Inflow	Peak Flow	250	400	550	**403**
Crane Prairie Inflow	Average Daily Flow on Oct. 1st	177	250	325	**269**
Prineville Reservoir Inflow	113 cfs	Apr 30	May 25	Jun 19	**June 3**
Prineville Reservoir Inflow	75 cfs	May 05	May 30	Jun 24	**June 11**
Prineville Reservoir Inflow	50 cfs	May 12	Jun 07	Jul 03	**June 19**
Whychus Creek nr Sisters	100 cfs	Jul 18	Aug 16	Sep 11	**August 16**

*Crane Prairie peak date forecast -- no prediction possible until April.
Historical values are shown for reference prior to the April 1 report.

ROGUE AND UMPQUA BASINS					
FORECAST POINT	*FORECAST THRESHOLD*	*FORECAST VALUE ---------- CHANCE OF EXCEEDING ---------- 90%*	*50%*	*10%*	*LONG-TERM AVERAGE VALUE*
South Umpqua R nr Brockway	90 cfs	Jul 08	Jul 26	Aug 12	**August 8**
South Umpqua R at Tiller	140 cfs	Jun 10	Jul 02	Jul 23	**July 11**
South Umpqua R at Tiller	90 cfs	Jun 29	Jul 22	Aug 12	**August 1**
South Umpqua R at Tiller	60 cfs	Jul 23	Aug 20	Sep 21	**August 28**

LAKE COUNTY AND GOOSE LAKE BASINS					
FORECAST POINT	*FORECAST THRESHOLD*	*FORECAST VALUE ---------- CHANCE OF EXCEEDING ---------- 90%*	*50%*	*10%*	*LONG-TERM AVERAGE VALUE*
Deep Ck ab Adel	100 cfs	May 08	May 28	Jun 17	**June 17**
Honey Ck nr Plush	100 cfs	Mar 28	May 02	Jun 06	**May 16**
Honey Ck nr Plush	50 cfs	Apr 15	May 17	Jun 18	**June 4**
Twentymile Ck nr Adel	50 cfs	Mar 27	Apr 26	May 26	**May 30**
Twentymile Ck nr Adel	10 cfs	May 25	Jun 17	Jul 10	**July 20**

HARNEY BASIN					
FORECAST POINT	*FORECAST THRESHOLD*	*FORECAST VALUE ---------- CHANCE OF EXCEEDING ---------- 90%*	*50%*	*10%*	*LONG-TERM AVERAGE VALUE*
Silvies R nr Burns	400 cfs	Apr 09	May 06	Jun 06	**May 21**
	200 cfs	Apr 17	May 15	Jun 12	**June 2**
	100 cfs	Apr 28	May 27	Jun 25	**June 13**
	50 cfs	May 15	Jun 19	Jul 23	**July 3**
Donner Und Blitzen R nr Frenchglen	200 cfs	May 08	May 30	Jun 21	**June 20**
Donner Und Blitzen R nr Frenchglen	100 cfs	May 29	Jun 18	Jul 08	**July 9**

Summary of Snow Course Data

February 2012

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
Oregon						
ALTHOUSE #3	5000	2/01/12	4	1.6e	9.6	8.8
ANEROID LAKE SNOTEL	7400	2/01/12	44	10.2	9.0	16.2
ANNIE SPRING SNOTEL	6010	2/01/12	57	17.3	26.6	26.0
ANTHONY LAKE (REV)	7130	1/31/12	54	15.0	14.2	--
ARBUCKLE MTN SNOTEL	5770	2/01/12	33	9.3	11.5	13.9
BARLEY CAMP AM	6900	2/02/12	9	2.6	--	10.3
BARNEY CREEK (NEW)	5840	1/30/12	21	4.9	6.2	--
BEAR FLAT MEADOW AM	5900	2/02/12	10	2.9	3.2	7.3
BEAR GRASS SNOTEL	4720	2/01/12	63	24.7	--	--
BEAVER DAM CREEK	5100	2/01/12	14	4.7	8.2	9.8
BEAVER RES. SNOTEL	5150	2/01/12	26	6.7	7.2	7.1
BIG RED MTN SNOTEL	6050	2/01/12	31	7.4	14.1	16.7
BIGELOW CAMP SNOTEL	5130	2/01/12	11	3.5	8.7	9.4
BILLIE CK DVD SNOTEL	5280	2/01/12	30	10.3	13.4	16.9
BLAZED ALDER SNOTEL	3650	2/01/12	49	17.1	12.6	21.4
BLUE MTN SPGS SNOTEL	5870	2/01/12	49	11.1	11.4	12.3
BOULDER CREEK AM	5690	1/31/12	9	2.7	--	2.6
BOURNE SNOTEL	5850	2/01/12	36	9.1	9.9	12.8
BOWMAN SPRNGS SNOTEL	4530	2/01/12	17	4.8	5.5	7.3
BUCK PASTURE AM	5700	1/31/12	2	.6	1.6	2.1
BUCKSKIN LAKE AM	5200	1/31/12	0	.0	.0	.7
BULLY CREEK AM	5300	1/31/12	9	2.7	--	2.8
CALIBAN ALT	6500	1/30/12	36	11.6	16.2	19.1
CALL MEADOWS AM	5340	1/31/12	6	1.8	2.0	3.6
CAMAS CREEK #3	5850	1/31/12	12	3.5	8.7	9.7
CASCADE SUM. SNOTEL	5100	2/01/12	45	15.1	25.2	21.3
CHEMULT ALT SNOTEL	4850	2/01/12	20	6.8	7.9	7.3
CLACKAMAS LK. SNOTEL	3400	2/01/12	25	6.8	5.0	10.2
CLEAR LAKE SNOTEL	3810	2/01/12	28	7.7	4.9	10.4
COLD SPRINGS SNOTEL	5940	2/01/12	39	12.8	19.6	21.3
COLVIN CREEK AM	6550	2/02/12	3	1.4	--	3.2
COUNTY LINE SNOTEL	4830	2/01/12	4	2.5	1.1	4.2
COX FLAT AM	5750	2/02/12	3	1.4	.8	5.3
CRAZYMAN FLAT AM	6100	2/02/12	12	3.8	5.4	6.3
CRAZYMAN FLAT SNOTEL	6180	2/01/12	25	7.9	10.8	11.9
DALY LAKE SNOTEL	3690	2/01/12	17	6.9	3.4	12.6
DEADHORSE GRADE	3700	1/31/12	4	1.2	2.0	7.4
DEADWOOD JUNCTION	4600	2/01/12	10	3.3	6.9	6.3
DERR SNOTEL	5850	2/01/12	32	8.0	9.8	10.3
DIAMOND LAKE SNOTEL	5280	2/01/12	22	9.8	9.2	12.9
DOG HOLLOW AM	4900	2/02/12	0	.0	.0	1.0
DOOLEY MOUNTAIN	5430	1/30/12	21	4.8	8.0	6.1
EAST EAGLE	4400	1/31/12	54	13.2	13.7	16.2
EILERTSON SNOTEL	5510	2/01/12	22	8.4	7.0	7.7
ELDORADO PASS	4600	1/30/12	6	1.8	4.7	3.2
EMIGRANT SPGS SNOTEL	3800	2/01/12	10	3.1	5.8	5.9
FINLEY CORRALS AM	6000	2/02/12	21	6.5	10.4	11.1
FISH CREEK SNOTEL	7660	2/01/12	41	9.1	24.0	17.6
FISH LK. SNOTEL	4660	2/01/12	14	5.9	6.9	9.3
FLAG PRAIRIE AM	4750	1/31/12	10	3.0	--	4.1
FOURMILE LAKE SNOTEL	5970	2/01/12	36	13.0	16.5	21.3
GERBER RES SNOTEL	4890	2/01/12	2	.7	.6	1.6
GOLD CENTER SNOTEL	5410	2/01/12	27	7.0	7.1	8.1
GOVT CORRALS AM	7450	1/31/12	17	5.1	9.6	--
GREENPOINT SNOTEL	3310	2/01/12	21	8.1	5.2	14.4
HART MOUNTAIN AM	6350	2/02/12	0	.0	.0	1.6
HIGH PRAIRIE	6100	1/27/12	89	29.0	21.1	30.9
HIGH RIDGE SNOTEL	4920	2/01/12	61	16.6	18.3	16.9

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
Oregon (continued)						
HOGG PASS SNOTEL	4790	2/01/12	49	15.0	12.0	26.8
HOLLAND MDWS SNOTEL	4930	2/01/12	10	4.4	8.0	17.4
HOWARD PRAIRIE	4500	2/01/12	8	2.7	4.1	6.1
HUNGRY FLAT	4400	1/31/12	7	2.0	.0	4.2
IRISH-TAYLOR SNOTEL	5540	2/01/12	53	18.0	19.7	23.8
JUMP OFF JOE SNOTEL	3520	2/01/12	14	4.3	6.9	8.9
KING MTN #1	4500	2/01/12	6	1.7	3.7	5.4
KING MTN #2 SNOTEL	4340	2/01/12	1	.1	1.3	3.1
KING MTN #3	3650	2/01/12	0	.0	.0	.8
KING MTN #4	3050	2/01/12	0	.0	.0	.2
LAKE CK R.S. SNOTEL	5240	2/01/12	32	8.2	8.6	9.5
LITTLE ALPS	6200	1/31/12	28	6.4	7.0	8.5
LITTLE ANTONE (ALT)	5000	1/31/12	24	5.6	6.5	6.5
LITTLE MEADOW SNOTEL	4020	2/01/12	35	14.1	14.9	18.2
LOOKOUT BUTTE AM	5650	1/31/12	0	.0	.0	.4
LOUSE CANYON AM	6440	1/31/12	0	.0	5.0	4.9
LUCKY STRIKE SNOTEL	4970	2/01/12	16	5.7	6.4	7.6
MADISON BUTTE SNOTEL	5150	2/01/12	8	2.9	3.0	4.5
MARION FORKS SNOTEL	2590	2/01/12	18	8.0	.4	8.1
MARY'S PEAK REV	3620	2/01/12	12	4.1e	.0	4.5
MCKENZIE SNOTEL	4770	2/01/12	57	20.8	24.9	29.4
MEACHAM	4300	2/01/12	18	4.8	7.0	7.6
MILKSHAKES SNOTEL	5580	2/01/12	74	22.4	--	--
MILL CREEK MDW	4400	1/27/12	24	7.6	6.3	9.1
MILLER WOODS SNOTEL	420	2/01/12	0	.0	.0	--
MOSS SPRINGS SNOTEL	5760	2/01/12	51	13.0	15.3	17.5
MT ASHLAND SWBK	6400	1/30/12	34	11.9	14.8	20.6
MT HOOD	5370	1/31/12	102	40.0	33.5	43.0
MT HOOD TEST SNOTEL	5370	2/01/12	99	36.5	29.0	38.6
MT HOWARD SNOTEL	7910	2/01/12	28	9.0	8.3	10.3
MUD RIDGE SNOTEL	4070	2/01/12	54	17.4	12.2	16.9
NEW CRESCENT SNOTEL	4910	2/01/12	20	4.8	9.0	9.2
NEW DUTCHMAN #3	6320	1/31/12	90	28.0	31.2	35.7
NORTH FK RES SNOTEL	3060	2/01/12	29	12.1	8.9	11.6
OCHOCO MEADOW SNOTEL	5430	2/01/12	19	5.9	7.4	7.3
OREGON CANYON AM	6950	1/31/12	5	1.5	5.9	4.5
PARK H.Q. REV	6550	1/31/12	85	26.3	39.0	37.5
PATTON MEADOWS AM	6800	2/02/12	19	5.5	9.7	10.9
PEAVINE RIDGE SNOTEL	3420	2/01/12	18	6.7	6.6	9.5
PUEBLO SUMMIT AM	6800	1/31/12	1	.3	1.6	1.9
QUARTZ MTN SNOTEL	5720	2/01/12	0	.7	.0	2.6
R.R. OVERPASS SNOTEL	2680	2/01/12	0	.0	.0	.5
RED BUTTE #1	4560	1/31/12	11	3.3	4.0	8.3
RED BUTTE #2	4000	1/31/12	0	.0	.0	4.4
RED BUTTE #3	3500	1/31/12	0	.0	.0	2.0
RED BUTTE #4	3000	1/31/12	0	.0	.0	1.0
RED HILL SNOTEL	4410	2/01/12	63	26.8	23.8	30.2
ROARING RIVER SNOTEL	4950	2/01/12	34	12.8	15.9	19.3
ROCK SPRINGS SNOTEL	5290	2/01/12	17	3.2	4.7	4.1
ROGGER MEADOWS AM	6500	2/02/12	6	1.8	7.6	8.6
SADDLE MTN SNOTEL	3110	2/01/12	0	.0	.0	--
SALT CK FALLS SNOTEL	4220	2/01/12	27	7.3	13.9	13.1
SANTIAM JCT. SNOTEL	3740	2/01/12	25	10.1	9.3	14.6
SCHNEIDER MDW SNOTEL	5400	2/01/12	72	18.9	18.5	22.3
SEINE CREEK SNOTEL	2060	2/01/12	0	.0	.0	2.7
SEVENMILE MARSH SNTL	5700	2/01/12	36	11.2	18.3	20.1
SHERMAN VALLEY AM	6600	2/02/12	11	3.2	.0	7.9
SILVER BURN	3720	1/31/12	10	3.9	10.1	8.4
SILVER CREEK SNOTEL	5740	2/01/12	22	7.1	8.4	7.8
SILVIES SNOTEL	6990	2/01/12	13	4.0	11.1	11.1
SISKIYOU SUMMIT REV	4630	1/30/12	17	5.6	4.1	4.6
SKI BOWL ROAD	6000	1/30/12	33	10.0	12.3	16.1
SMITH RIDGE SNOTEL	3330	2/01/12	3	1.3	--	--
SNOW MTN SNOTEL	6220	2/01/12	23	5.1	8.2	7.8
SF BULL RUN SNOTEL	2690	2/01/12	6	2.9	.0	2.6

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
Oregon (continued)						
STARR RIDGE SNOTEL	5250	2/01/12	20	4.0	6.2	5.2
STRAWBERRY SNOTEL	5770	2/01/12	5	2.3	4.5	4.5
SUMMER RIM SNOTEL	7080	2/01/12	25	7.2	11.2	11.4
SUMMIT LAKE SNOTEL	5610	2/01/12	58	18.7	22.1	24.4
SUN PASS SNOTEL	5400	2/01/12	44	13.0	12.8	--
SWAN LAKE MTN SNOTEL	6830	2/01/12	22	8.1	15.0	--
SYCAN FLAT AM	5500	2/02/12	4	1.8	.0	4.5
TANGENT	5400	1/31/12	49	14.2	12.6	15.2
TAYLOR BUTTE SNOTEL	5030	2/01/12	14	4.1	5.9	5.4
TAYLOR GREEN SNOTEL	5740	2/01/12	47	12.9	13.1	14.5
THREE CK MEAD SNOTEL	5690	2/01/12	31	9.1	12.6	12.1
TIPTON SNOTEL	5150	2/01/12	32	6.2	10.0	10.3
TOKETEE AIRSTRIP SN	3240	2/01/12	0	.0	.5	5.5
TOLLGATE	5070	2/01/12	68	18.3	18.2	19.5
TROUT CREEK AM	7800	1/31/12	23	6.2	7.6	7.0
V LAKE AM	6600	1/31/12	1	.3	9.2	5.6
WOLF CREEK SNOTEL	5630	2/01/12	34	7.7	9.9	11.2
California						
ADIN MOUNTAIN	6350	1/30/12	6	2.4	8.2	8.5
ADIN MTN SNOTEL	6190	2/01/12	8	3.7	9.3	9.0
BLUE LAKE RANCH	6800	1/31/12	4	1.0	4.8	--
CEDAR PASS	7100	2/01/12	11	3.6	10.9	10.9
CEDAR PASS SNOTEL	7030	2/01/12	14	5.1	12.4	11.4
CROWDER FLAT AM	5200	2/02/12	0	.0	.0	2.6
CROWDER FLAT SNOTEL	5170	2/01/12	1	1.3	3.5	3.7
DISMAL SWAMP SNOTEL	7360	2/01/12	30	7.3	21.5	18.0
STATE LINE AM	5750	2/02/12	5	1.5	.0	4.8
Idaho						
BATTLE CREEK AM	5720	1/31/12	3	1.0	4.0	3.4
BULL BASIN AM	5460	1/31/12	3	1.0	2.0	2.1
MUD FLAT SNOTEL	5730	2/01/12	14	4.1	7.6	5.2
RED CANYON AM	6650	1/31/12	9	3.0	8.4	6.0
SOUTH MTN SNOTEL	6500	2/01/12	25	8.4	11.9	12.8
SUCCOR CREEK AM	6100	1/31/12	17	4.9	7.4	5.7
VAUGHT RANCH AM	5830	1/31/12	3	1.0	4.7	4.1
Nevada						
BALD MOUNTAIN AM	6720	2/02/12	0	.0	.0	2.7
BEAR CREEK SNOTEL	7800	2/01/12	35	7.8	15.1	12.5
BIG BEND (d)	6700	2/01/12	19	5.5	--	--
BIG BEND SNOTEL	6700	2/01/12	19	5.5	7.3	6.7
BUCKSKIN,L SNOTEL	6700	2/01/12	16	3.6	8.3	6.4
COLUMBIA BASIN AM	6650	2/01/12	16	3.5	5.6	7.3
DISASTER PEAK SNOTEL	6500	2/01/12	5	2.0	5.5	9.1
FAWN CREEK SNOTEL	7050	2/01/12	26	5.9	10.6	11.1
FRY CANYON	6700	1/25/12	17	4.2	5.4	6.0
GOLD CREEK	6600	1/25/12	18	3.9	5.9	4.2
GRANITE PEAK SNOTEL	7800	2/01/12	22	4.4	16.3	14.2
JACK CREEK, U SNOTEL	7280	2/01/12	26	7.5	9.4	11.4
LAMANCE CREEK SNOTEL	6000	2/01/12	5	1.1	5.8	9.4
LAUREL DRAW (d)	6700	2/01/12	17	5.0	--	--
LAUREL DRAW SNOTEL	6700	2/01/12	17	5.1	6.4	7.2
LITTLE BALLY MTN. AM	6000	2/02/12	2	.6	10.6	3.0
MERRIT MOUNTAIN AM	7000	2/01/12	6	1.3	4.7	5.6
MIDAS (d)	7200	2/01/12	5	1.1	4.0	2.8
QUINN RIDGE AM	6300	1/31/12	0	.0	3.6	2.1
SEVENTYSIX CREEK (d)	7100	2/01/12	31	6.2	--	--
SEVENTYSIX CK SNOTEL	7100	2/01/12	31	6.3	6.9	7.9
STAG MOUNTAIN AM	7700	2/01/12	8	1.8	7.4	4.2
TAYLOR CANYON (d)	6200	2/01/12	7	1.8	--	--
TAYLOR CANYON SNOTEL	6200	2/01/12	7	1.9	4.3	3.9
TOE JAM AM AM	7700	2/01/12	28	6.2	6.5	6.9
TREMEWAN RANCH	5700	1/25/12	8	1.8	1.7	1.7

(d) denotes discontinued site.

Basin Outlook Reports: How Forecasts Are Made

Federal – State – Private
Cooperative Snow Surveys

For more water supply and resource management information, contact:

USDA, Natural Resources Conservation Service
Snow Survey Office
1201 NE Lloyd Suite 900
Portland, OR 97232

Phone: (503) 414-3270 **Web site: *http://www.or.nrcs.usda.gov/snow/index.html***

Most of the annual streamflow in the western United States originates as snowfall that has accumulated in the mountains during the winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Measurements of snow water equivalent at selected manual snowcourses and automated SNOTEL sites, along with precipitation, antecedent streamflow, and indices of the El Niño / Southern Oscillation are used in computerized statistical and simulation models to prepare runoff forecasts. These forecasts are coordinated between hydrologists in the Natural Resources Conservation Service and the National Weather Service. Unless otherwise specified, all forecasts are for flows that would occur naturally without any upstream influences

Forecasts of any kind, of course, are not perfect. Streamflow forecast uncertainty arises from three primary sources: (1) uncertain knowledge of future weather conditions, (2) uncertainty in the forecasting procedure, and (3) errors in the data. The forecast, therefore, must be interpreted not as a single value but rather as a range of values with specific probabilities of occurrence. The middle of the range is expressed by the 50% exceedance probability forecast, for which there is a 50% chance that the actual flow will be above, and a 50% chance that the actual flow will be below, this value. To describe the expected range around this 50% value, four other forecasts are provided, two smaller values (90% and 70% exceedance probability) and two larger values (30%, and 10% exceedance probability). For example, there is a 90% chance that the actual flow will be more than the 90% exceedance probability forecast. The others can be interpreted similarly.

The wider the spread among these values, the more uncertain the forecast. As the season progresses, forecasts become more accurate, primarily because a greater portion of the future weather conditions become known; this is reflected by a narrowing of the range around the 50% exceedance probability forecast. Users should take this uncertainty into consideration when making operational decisions by selecting forecasts corresponding to the level of risk they are willing to assume about the amount of water to be expected. If users anticipate receiving a lesser supply of water, or if they wish to increase their chances of having an adequate supply of water for their operations, they may want to base their decisions on the 90% or 70% exceedance probability forecasts, or something in between. On the other hand, if users are concerned about receiving too much water (for example, threat of flooding), they may want to base their decisions on the 30% or 10% exceedance probability forecasts, or something in between. Regardless of the forecast value users choose for operations, they should be prepared to deal with either more or less water. Users should remember that even if the 90% exceedance probability forecast is used, there is still a 10% chance of receiving less than this amount. By using the exceedance probability information, users can easily determine the chances of receiving more or less water.

Interpreting Water Supply Forecasts

Each month, five forecasts are issued for each forecast point and each forecast period. Unless otherwise specified, all streamflow forecasts are for streamflow volumes that would occur naturally without any upstream influences. Water users need to know what the different forecasts represent if they are to use the information correctly when making operational decisions. The following is an explanation of each of the forecasts.

90 Percent Chance of Exceedance Forecast. There is a 90 percent chance that the actual streamflow volume will exceed this forecast value, and there is a 10 percent chance that the actual streamflow volume will be less than this forecast value.

70 Percent Chance of Exceedance Forecast. There is a 70 percent chance that the actual streamflow volume will exceed this forecast value, and there is a 30 percent chance that the actual streamflow volume will be less than this forecast value.

50 Percent Chance of Exceedance Forecast. There is a 50 percent chance that the actual streamflow volume will exceed this forecast value, and there is a 50 percent chance that the actual streamflow volume will be less than this forecast value. Generally, this forecast is the middle of the range of possible streamflow volumes that can be produced given current conditions.

30 Percent Chance of Exceedance Forecast. There is a 30 percent chance that the actual streamflow volume will exceed this forecast value, and there is a 70 percent chance that the actual streamflow volume will be less than this forecast value.

10 Percent Chance of Exceedance Forecast. There is a 10 percent chance that the actual streamflow volume will exceed this forecast value, and there is a 90 percent chance that the actual streamflow volume will be less than this forecast value.

*Note: There is still a 20 percent chance that actual streamflow volumes will fall either below the 90 percent exceedance forecast or above the 10 percent exceedance forecast.

These forecasts represent the uncertainty inherent in making streamflow predictions. This uncertainty may include sources such as: unknown future weather conditions, uncertainties associated with the various prediction methodologies, and the spatial coverage of the data network in a given basin.

30-Year Average. The 30-year average streamflow for each forecast period is provided for comparison. The average is based on data from 1971-2000. The % AVG. column compares the 50% chance of exceedance forecast to the 30-year average streamflow; values above 100% denote when the 50% chance of exceedance forecast would be greater than the 30-year average streamflow.

AF - Acre-feet, forecasted volume of water are typically in thousands of acre-feet.

These forecasts are given to users to help make risk-based decisions. Users can select the forecast corresponding to the level of risk they are willing to accept in order to minimize the negative impacts of having more or less water than planned for.

To Decrease the Chance of Having Less Water than Planned for: A user might determine that making decisions based on a 50 percent chance of exceedance forecast is too much risk to take (there is still a 50% chance that the user will receive less than this amount). To reduce the risk of having less water than planned for, users can base their operational decisions on one of the forecasts with a greater chance of being exceeded such as the 90 or 70 percent exceedance forecasts.

To Decrease the Chance of Having More Water than Planned for: A user might determine that making decisions based on a 50 percent chance of exceedance forecast is too much risk to take (there is still a 50% chance that the user will receive more than this amount). To reduce the risk of having more water than planned for, users can base their operational decisions on one of the forecasts with a lesser chance of being exceeded such as the 30 or 10 percent exceedance forecasts.

Using the forecasts - an Example

Using the 50 Percent Exceedance Forecast. Using the example forecasts shown below, there is a 50% chance that actual streamflow volume at the Boise River near Twin Springs will be less than 685 KAF between April 1 and July 31. There is also a 50% chance that actual streamflow volume will be greater than 685 KAF.

Using the 90 and 70 Percent Exceedance Forecasts. If an unexpected shortage of water could cause problems (such as irrigated agriculture), users might want to plan on receiving 610 KAF (from the 70 percent exceedance forecast). There is a 30% chance of receiving *less* than 610 KAF.

Alternatively, if users determine the risk of using the 70 percent exceedance forecast is too great, then they might plan on receiving 443 KAF (from the **90** percent exceedance forecast). There is 10% chance of receiving less than 443 KAF.

Using the 30 or 10 Percent Exceedance Forecasts. If an unexpected excess of water could cause problems (such as operating a flood control reservoir), users might plan on receiving 760 KAF (from the 30 percent exceedance forecast). There is a 30% chance of receiving *more* than 760 KAF.

Alternatively, if users determine the risk of using the 30 percent exceedance forecast is too great, then they might plan on receiving 927 KAF (from the 10 percent exceedance forecast). There is a 10% chance of receiving more than 927 KAF.

Users could also choose a volume in between any of these values to reflect their desired risk level.

OWYHEE AND MALHEUR BASINS

Streamflow Forecasts - February 1, 2006

		<<====== Drier ====== Future Conditions ======= Wetter =====>>				
Forecast Point	Forecast Period	Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
MALHEUR near Drewsey	FEB-JUL	148	184	210	165	238	282	127
	APR-SEP	87	110	128	168	147	177	76
NF MALHEUR at Beulah	FEB-JUL	108	127	141	157	156	178	90
OWYHEE RESV INFLOW (2)	FEB-JUL	602	792	935	134	1090	1340	700
	APR-SEP	341	473	575	134	687	869	430

** 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.*

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Official Business

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